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ABSTRACT

The purpose of this handbook is to provide guidance to planners of new schools, and to those involved with additions and/or improvements to existing schools. This publication covers guidelines and pertinent information concerning: an outline for a comprehensive educational survey and guidelines for writing educational facility specifications: facility site selection and development: roles of people involved in facility planning: facility dimensions per grade level: space allocation: environmental factors: construction; furniture and equipment: occupying, evaluating, and maintaining the new facility: and financing the new facility. Sample agreements between architect and owner and contractor and owner are included. An appendix contains the Alabama Public School laws pertaining to facilities. (Author/MLF)

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HANDBOOK ON PLANNING SCHOOL FACILITIES

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FOREWORD

The purpose of this publication is to provide guidance to planners of future new schools, additions to existing schools, and the up-dating of other schools. The term **planners** includes parents teachers, administrators, educational consultants, architects, and all other people concerned with public education.

Educational facilities should provide for and be conducive to new and emerging expectations of schools being reflected in many educational developments. Uniform programs of instruction, materials, teaching competence and teaching methodology are no longer acceptable in the context of the broader role society is demanding that schools play. Today's schools must emphasize the development of learning programs on an individual basis and should be designed to make this possible.

Since we believe that enrichment beyond the textbook should be characteristic of today's schools, school facilities should be planned to allow the teacher to plan a program that provides experiences that are truly important to children. We hope they can come to school with a certain feeling of eagerness because programs have been developed that capture the native curiosity of youngsters.

The whole movement toward better educational opportunities for children brings about needed changes in the overall educational environment, so that teachers may be able to plan programs that teach children how to learn rather than just what to learn.

We trust that this handbook will serve as a guide to the accomplishment of the true objectives of education.

Wayne Teague

Wayne Teague
State Superintendent of Education

INTRODUCTION

The many facets of determining need, size, type, location and function of new educational facilities is both a responsibility and an opportunity for the concerned community and citizen. Probably no other community endeavor offers a greater opportunity for community cohesiveness and unity of purpose than to be organized for planning a new educational facility. Certainly there can be no greater community responsibility than that of the education of our young. Thus it has been said that new educational facilities involve the purse and the child, our most precious assets. It is with this consideration that this publication addresses itself to the problems of developing, constructing, utilizing and maintaining educational facilities for the young citizens of our state.

Perhaps no other establishment more accurately reflects the cultural values, changes and aspirations of its citizenry than does the school. If these were standardized concepts, a uniform facility would admirably accommodate the needs and meet the objectives of a universal people. We know this is not true and therefore we must, through varying facilities, meet the unique needs of a creative people. The modern educational facility is individually tailored to meet the carefully determined needs of the progressive community it is to serve.

An educational facility must be many things to many people. For some of the citizens interested primarily in aesthetics, the facility will represent a status symbol and a landmark of achievement for the community. For some it will be a workshop. Perhaps some will consider it an opportunity for economic development. The possible real truth is that it represents the hope of the community.

The educational facility usually represents a compromise between what is aspired and desired and what is economically and financially feasible or possible. This always requires a careful evaluation of the thrust of the value emphasis. During a church building program it seems that some members will invariably leave due to differences of opinion about a host of conditions. Citizens of a community seldom move due to school building differences, yet it can be said that an educational facility and curriculum can be a community's greatest asset to attract new industry and people.

It is the purpose of this publication to contribute to the educational enrichment of our state's citizenry through educational facilities that will meet current needs and provide facility planning for the far reaching projections of a concerned people.

[redacted]
School Architect

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75.10.00

Chapter I

The Comprehensive Education Survey:

75.10.01 The educational planner has developed certain skills and tools in the application of abilities to diagnose accurately a community's educational needs and abilities. An educational planner conducts a variety of evaluations to determine a community's educational requirements and resources available to meet those requirements. This comprehensive survey is conducted by professionals in each area of investigation. The educational planner directs the overall operation which may take from three to twelve months to complete. This study serves education in three areas of planning. First, it serves as a history of the educational efforts of the community. Second, the current status of the community's educational efforts are clearly stated and in comparative terms to other systems. Third, the document provides direction for the community and its educational leaders as they attempt to meet educational needs. The document is often used as a basis for evaluating the educational programs in the future.

75.10.02 In an effort to save money, some school systems attempt to conduct a comprehensive survey with available in-house personnel. This is seldom successful and tends to project a bias. The State Department of Education survey office can direct an interested school system to one of several universities conducting comprehensive educational surveys.

75.10.03 Educational Planning Services use the abbreviated outline for comprehensive surveys shown here. The remainder of this chapter will be directed to this outline because of its value in data collection and analysis and long-range plan development.

75.11.00

OUTLINE FOR COMPREHENSIVE SURVEYS

75.11.01 I. Preliminary Activities

A. Collection of background data
History of system
Maps of system
Enrollment by grade
Age-grade table
Building floor plans
Directory of personnel

Copies of current budget
Financial & statistical reports

B. Organization of Survey Team

75.11.02 II. Community

A. Total Environment
- Wealth
- Health
- Population
- Occupation
- Industry
- Geographic Location to
  - Urban centers
  - Rural areas

B. History of Community

C. Characteristics of Population
- Age distributions
- Educational Status
- Occupational distribution
- Distribution by race & nationality
- Increase (or decrease) in total
- Birth data

D. Information on Business & Industrial Community
- Number
- Size
- Types
  - Number of Employees
  - Types & sources of raw materials
  - Distribution of finished product

E. Resources of community
- Physical
- Social
- Cultural

F. Public's Knowledge & Attitudes Toward School System

G. Community Social Agencies
- Summaries of work in
  - Health
  - Library
  - Recreation

75.11.03 III. General Administration

- A. Administrative & Supervisory Organization of System
- B. Composition of Board of Education
- C. Organization of Board of Education
- D. Policies of Board of Education

75.11.04 IV. Business Administration

- A. Business Organization, Personnel & Routines
- B. Budgeting Procedures, Financial Accounting, Financial Reporting
- C. Maintenance & Operations
- D. Supply Management
  - Purchase
  - Storage
  - Distribution
- E. Insurance Program
  - Types
  - Policies in Force
  - Schedules of Premium Dates Payments
- F. Payroll Procedures
- G. Transportation
  - Buses
    - Cost
    - Age
    - Condition
  - Students
    - Number
    - Miles
    - Time
- H. Relationship Between Business Administration & Education Programs

75.11.05 V. Instructional Program

A. Aims & Objectives

B. Teaching Methods
Supplies & Materials
Equipment

C. Age-grade Progress

D. Holding Power of High School

E. Follow-up of High School Graduates
  Jobs Held
  Additional Education

F. Organization & Duties of Staff

G. In-service Programs
  Accomplishments
  Effect on Instructional Program

H. Pupil Personnel
  Testing Program
  Pupil Personnel Data

I. Community Resources

J. Extracurricular Program
  Scope
  Student Participation
  Outcomes

75.11.06 VI. Teaching & Non-instructional Personnel

A. Policy or Policies Followed in
(1) Selection
(2) Appointment
(3) Assignment of all personnel

B. Preparation
  Experience
  Salary Schedules
    State Minimum
    Similar School Districts

In State
Adjoining States

C. Duties of Each

D. Staff Turnover
  Promotion
  Tenure

E. Participation of Teacher/Non-Teacher in Policy Formation—Other Areas

75.11.07 VII. Special Services

A. School census
School attendance

B. Health Service
  Record Forms

C. Food Service
  Nutrition
  Cost
  Administration

D. Social Welfare Services
  Degree of Cooperation

E. Libraries
  Volumes
  Materials
  Equipment
  Utilization

F. Educable Mentally Retarded
  Other atypical classes

75.11.08 VIII. School Community Relations

A. Methods/Media

B. Community Organizations
  Speeches
  Programs

C. Cooperative Planning with Community Organizations

(1) Use of school facilities
(2) School use of other facilities

75.11.09 IX. Buildings & Grounds

A. Evaluation (& inventory) of Existing School Property

B. Building & Site Needs
(1) Utilization of Present
(2) Projected Populations
(3) Projected Programs (Instructional)

C. Time Line (Planned) Building Remodeling-Renovating Program

75.11.10 X. Student Population

A. Existing Enrollments

B. Holding Power Projections

C. Projections of Population

75.11.11 XI. School Finance

A. Cost of School System

B. Teacher Loads (compare)

C. Total Cost of Recommended Program

D. Present Effort to Support Schools
(1) Assessed Valuation Per Pupil
(2) School Tax Rate
(3) Municipal (County) Tax Rate
(4) Bonded Debt
a. Limit
b. Level

E. Existing Obligations of City (County)

F. Recommended Financial Program Tax Rates Required

75.11.12 XII. Report of Findings and Recommendations

A. To Board
To Staff
To Community

75.12.00 GUIDELINES FOR WRITING EDUCATIONAL SPECIFICATIONS

75.12.01 Educational specifications are developed to assist the faculty and administration of a specific school system in consolidating and clarifying their requirements for a new facility or renovating an existing facility. In the process, educational objectives of each department as well as the system or school as a whole, will be developed. A second purpose of written educational specifications is to provide direction for the architect in designing a facility that will adequately house the educational program not only of the present but also of the future.

75.12.02 **General Instructions**
Identify the department and/or grade level to which this reports pertains. So that no area or vital information is inadvertently overlooked, the following information is necessary, in the organizational format indicated below.

I. Program

75.12.03 An introductory statement should be made containing an overview of your department, delimiting the subjects taught, i.e., The Language Arts Department includes: English language arts, reading, speech and drama, student publications. (List extracurricular activities if they need additional space or other special consideration.)

75.12.04 **Objectives**
Enumerate or describe educational objectives or overall goals of your instructional department which may later be reduced to behavioral objectives for use within specific subject matter.

75.12.05 **Recent Trends: Changes in methods and organization**
Enumerate or describe discernible trends that you may wish to employ in your instruction, i.e., the audio-lingual approach to teaching all languages, or multi-media presentations.

75.12.06 Physical Activities

Where applicable, describe the kinds of physical activity that will take place within the instructional spaces, i.e., simulated games, individual student use of audio-visual material, group calisthenics.

II. Physical Facilities

75.12.07 Special Features, Furniture and Equipment

Indicate any unusual features associated with you area, i.e., drafting room should have 150 footcandles of illumination; band room should **not** be carpeted; clothing lab should have ceiling drop outlets.

75.12.08 Suggested Furniture and Equipment

List the kinds of furniture and equipment necessary for instruction in your area. Enumerate (and indicate quantities required) major kinds of furniture, i.e., chairs, tables (rectangular, round, etc.); individual desk and chairs; kiln, drying racks; portable or built-in rises; perimeter or island lab stations.

75.12.09 Facilities Table

Include the following information: function; space description; number of students; square feet; and furniture and equipment.

75.12.10 Space Relationships

Indicate desired relationships within your area and between this area and other areas.

75.20.00

Chapter II

Educational Facility Site Selection and Development

75.20.01 Few construction projects provide a greater challenge to the architect and builder than does that of school building. Every project is only a step away from tradition, a step into the future with a reality for practical application now. This is all done on public funded budgets in compliance with rigid building specifications. One of the vital considerations often ignored, to the detriment of function, is the site location and development. Unified planning as a cooperative community endeavor can be the first step to a successful educational program.

75.20.02 A school site is the total developed and undeveloped acreage serving a school. This includes acreas occupied by drives, walks, parking facilities and other improvements to the site, as well as the buildings. As with any other site, the school site is more than just the land on which school buildings and structures are located. By providing the space and setting for the school building and for essential educational functions, the school thus becomes a crucial aspect of the environment. It is often the focal pride of the community. It is the mark of the effort of the people to cherish the value of our young. An ideal school site creates an environment in which educational policy and objectives can be accommodated and not obstructed. The school site is an integral part of the educational plan and one of the basic tools in the educational process.

75.20.03 Educational facility site planning, as a function of effective land use planning and an integral part of the overall educational program, is the concern of this portion of this handbook. If it is desired to optimize utilization of our land resource, there must be a symbiotic relationship between school site planning and overall comprehensive community planning.

75.21.00 PHYSICAL CHARACTER:

75.21.01 An educational program is embellished by the environment in which it is cast. Well manicured lawns, artistic landscaping and planned buildings are all a vital part of the overall educational considerations of the educational director. A natural elevation can complement planned facilities for maximum utilization. Slight modifications to natural settings can greatly enhance the physical character of the ground, i.e., excavations for a swimming pool make an excellent run-up hillside in a level terrain; hillsides, with some arrangements make a natural amphitheatre; marshy areas may be converted to a biological laboratory in a real life study; slopes may serve as an open-air concert theatre and steep slopes may be artistically landscaped. This lists only a few possiblities for utilizing existing physical characeristics of land to maximum advantage.

75.21.02 A natural elevation with satisfactory approaches for avoiding long or difficult climbs makes a desirable setting. Walks, drives and parking must be a factor in site selection, as relative to topography. It is desirable that children being transported to school be able to debark into a covered area, thus a drive should be adjacent to the school complex for this purpose.

75.21.03 Drainage, particularly to contiguous property is often a nettlesome and costly problem. Drainage of the site property may present costly problems. Known drainage from contiguous property should be avoided or legal considerations be provided for this contingency. Those areas to be designated as recreational and playground, should be characterized by rapid drainage and quick drying. The architect, in cooperation with a soils engineer, may render advice on area designations.

75.21.04 What may seem to be flaws in an otherwise excellent site, i.e., an occasional surface irregularity, rock outcroppings or an old roadbed, need not be counted as a deterrent to site location. These flaws may be easily converted to a distinct advantage by the architect and educational facility planner. A careful analysis of available site locations is certainly warranted.

75.21.05 Adverse subsoil conditions such as rocks, poor bearing soils, high water levels, and soils impervious to water will usually cause difficulties and increased costs to inhabit. Difficult site contours may cause substantial extra expense. Landfill for marshy areas is costly and and often difficult to build upon. Real estate should not be seriously considered for a school site unless these matters have been thoroughly investigated. No building should ever be designed before its proposed location has been subjected to a thorough subsurface inspection by means acceptable to those responsible for design success.

75.21.06 Sites not having proximate public utilities should first be taken on an option which permits the privilege to drill for a potential potable water supply, and at the same time, to test the overburden for percolation in compliance with the requirements of the State Board of Health. A very expensive error can be made in failing to obtain a site from which potable water may be derived and into which no effluent from approved sewage treatment facilities can be discharged.

75.22.00 LOCATION OF SITE:

75.22.01 Schools generally should be located near the center of the present and the probable future school population which is to be served. There are exceptions to this generality. Federal courts have in some cases ruled against the neighborhood school and educational facility planners have examined the concept of the "Educational Park" where a large complex of buildings would house the educational program of a community. Acreage is sometimes more economical and abundant than in the neighborhood it serves. In other words, the amount of good space available is frequently a more compelling cause for site selection than is central location. The increasing ease of transportation, public and private, tends to nullify the initial advantages of a centrally located site. In this case, safety and convenience of approach are of greater relative importance.

75.22.02 Where transportation of pupils is involved, maximum travel time for elementary pupils should not exceed thirty minutes and one hour for secondary pupils. A planned route for bicyclists should be considered with covered racks for the cycles.

75.22.03 The Council of Educational Facility Planners has indicated the following distances as reasonable maximums for pupils walking to school:

Elementary School	3/4 mile
Junior High School	1½ miles
Senior High School	2 miles

75.22.04 The environment of the site cannot be over-emphasized because attractive physical surroundings have an especially strong influence on youth. The physical surroundings help to set the atmosphere for activities to be conducted within a school. This calls for quiet surroundings, clean fresh air, abundant sunshine, no disturbing noises and spacious areas for play and study when possible. It is unquestionably true that the wholesome cheerfulness and beauty of the school site will pervade the entire school and be reflected in countless ways in the attitudes and work of the students. Isolation from commercial enterprises should be considered in location considerations. Close proximity to sanatoriums, hospitals, fire stations, universities and other institutions should be avoided. Resourceful treatment of landscaping can usually minimize the disfiguring effects of essential but unsightly facilities such as parking areas, service drives and refuse-disposal units. A school that borders a busy boulevard might erect a high landfill bank, cover this with dense tree or shrub growth, and eliminate a disruptive noise factor and a safety hazard.

75.22.05 A major consideration in selecting a school site is to provide conditions conducive to the safety of the children. The location of the building on the site should permit children to pass through a safety zone before being confronted by traffic dangers. Children should never be required, by location of the school, to cross railroads, automobile speedways, multi-lanes of traffic or bridges and canals. The site should be free from fire, water and land hazards. Automobile roads within the site should be constructed so as to accommodate one-way traffic only, with proper signs clearly indicating their directional use.

75.22.06 Where buses are used for transportation, careful consideration must be given to loading and unloading facilities in order to achieve maximum safety for children. Parking space for school visitors, located near the main entrance should be provided. Speed breakers should be constructed to deter excessive speeds by drivers. Adequate lighting of all parking facilities may eliminate or reduce personal injury to night visitors. Vandalism and other acts of an undesirable nature may be prevented by well lighted areas.

75.22.07 When community recreation is a planning factor, consideration may be given to setting aside a special area for picnic tables and fireplaces or perhaps covered eating areas.

75.22.08 It is advisable to have a special playground area for children of lower grades. This may be near the family picnic area.

75.22.09 Efficiency, economy, and convenience are all factors to be considered in site selection. Inexpensive access to gas, water, sewage, electricity and telephone service are also factors of consideration. Since it is recommended that all public utility services be placed underground, extensive pipelaying and wiring on the part of the owner may involve large financial expenditures. Every effort should be made to avoid possible difficulties due to the pressure of main utility lines on or over the site under consideration. When site facilities are planned, consideration should be given to outdoor drinking fountains, hose connections near the various courts and play fields, lights for courts, playground areas, and drives and parking areas. Underground lawn sprinklers are desirable for a vigorous lawn and landscape plan.

75.23.00 SIZE OF SITE

75.23.01 Size of any school site should be determined by the nature and scope of the contemplated educational program. Actual layouts of spaces needed by various phases of the program should be made. In high density metropolitan areas, educationsl facilities may be erected in multi-story complexes on portions of a city block. In Alabama, generally, emphasis is still on spacious outdoors to exercise, play and study. Because site size problems vary according to type of school organization the following criteria are offered.

75.23.02 **Elementary and Middle Schools:** MINIMUM: 5 acres plus an additional acre for each 100 pupils of predicted ultimate maximum enrollment. Recommended: 10 acres plus an additional acre for each 100 pupils of predicted ultimate maximum enrollment.

75.23.03 **Junior High Schools:** MINIMUM: 10 acres plus an acre for each 100 pupils of predicted maximum enrollment. Recommended: 20 acres plus an additional acre for each 100 pupils of predicted ultimate maximum enrollment.

75.23.04 **Senior High Schools:** MINIMUM: 15 Acres plus an additional acre for each 100 pupils of predicted ultimate maximum enrollment. Recommended: 30 acres plus an additional acre for each 100 pupils of predicted ultimate maximum enrollment.

75.23.05 **Area Vocational Schools:** MINIMUM: 5 Acres plus an additional acre for each 100 pupils of predicted ultimate maximum enrollment.

75.23.06 There are several reasons for larger school sites becoming essential to Alabama schools. Parking-on-the-site for pupils, faculty and the public have made increased demands on school space. Growing communities have not been able to make provisions for adequate parks and recreation areas for the public and have found it both desirable and economical to combine public recreational and school recreational areas. Where public park land adjoins a public school site, it should be made suitable for and available to the school for its use in its out-of-doors programs. In some instances schools and communities have jointly planned school and community facilities to obtain the maximum use of a site.

75.23.07 In Alabama school systems, one-story schools occupy major portions of the alloted site. Educators have recently been made aware of the learning value of organized playgrounds. Spaces for age-grouped play areas are being considered now in site planning. School gardens, greenhouses, bedding areas and agricultural demonstration plots are areas requiring additional acreage. Ecological and nature study areas are assets to the school site. The trend for providing space for a greater variety of outdoor teaching areas necessitates larger sites. Larger sites result in greater flexibility and substantial improvements in educational programs, community services and efficiency of operation.

75.23.08 Shape of a site has a distinct bearing on functional capability of the total educational complex. It would be ideal to let functional requirements dictate shape of sites. Since this is not generally possible, the shape trades out with acreage to provide for adequate site size. Ordinarily, satisfactory arrangements can be achieved on a rectangular site with dimensions in a ratio of approximately three to five. It is possible to secure suitable arrangements on irregularly shaped sites through appropriate building design and placement. Careful consideration must be made for functional areas and the site should have frontings to afford adequate walks and drives.

75.23.09 Almost all suburban communities are burgeoning in population. Their possible destinies, in point of future population, are vaguely felt and dimly perceived. A small restricted school site, a few years hence, is likely to prove an obstacle to adjustment to new conditions, and may prove to be one of the most compelling factors in the creation of a "blighted" district. A large school site generally has the opposite effect.

75.23.10 Even for small schools, a large site should be considered essential. For many activities such as baseball, tennis, track and football, the same space needs are felt by both large and small schools.

75.23.11 Experience has indicated that ultimate site requirements should be met through initial site acquisition. Land adjacent to a new school soon becomes occupied with housing developments. Care must be exercised when well-meaning developers donate a small tract of land for school construction with reversionary clauses.

75.24.00 ACQUISITION OF SITE

75.24.01 When the school board has determined that a particular tract of land has the characteristics to be a suitable educational site, one of the toughest problems is yet to be solved. How to acquire the property? Negotiations of property are often done in abstract arrangements rather than constituted board meeting times. While the board of education does not covet a reputation of competing with local realtors, it is good for the board to have an on-going realty practice of acquiring desirable property for future needs and to sell property no longer meeting the needs of the educational program. This practice provides several options to the board and tends to offset inflated land prices when needs for a particular property are made public. Students benefit in savings of capital outlay by education when boards maintain an ongoing and active real estate action group actively engaged in purchase and resale of properties.

75.24.02 Three legal methods are usually used in acquiring land for school sites, donation, purchase and eminent domain. Legal counsel should be secured in all land negotiations to insure title and abstracts are clear of encumbrances. Water, mineral and use rights should accompany transfer of all property. Reversionary clauses should be avoided as well as conditional property clauses.

75.24.03 In most instances, donors of free lands for school usually are sincerely concerned citizens wanting to give in the spirit of civic pride. There is a strong urge to declare that the land will revert to the estate if not used for the purposes for which it was donated. Such reverters, conditions and exceptions should be averted. There are exceptions to these conditions and every free site proposed should be evaluated in meeting requirements of a local policy governing such gifts. It may be prudent for each school board to have on record a policy regulating acceptance or rejection of such properties in order that well meaning citizens may not be offended if such gifts are rejected.

75.24.04 Outright purchase by negotiation is usually the most satisfactory in acquiring property to accommodate the desired educational program. Alabama school boards have authority to buy, hold, and sell lands for school sites through authority of the State Superintendent of Education by virtue of Sections 99, 113, 168, 183, and 184 of Title 52 Code of Alabama.

75.24.05 The least desirable method of obtaining a school site is that of eminent domain. This method gives public officials the right to acquire land for public use by condemning the property, paying the owner a just price and obtaining rights to the property. Since this court directed action is used only when the owner refuses to sell or the price cannot be agreed upon, school boards hesitate to use it.

75.24.06 Cost of land is quite low in comparison with structures and other improvements erected on the school site. A poorly suited parcel of land will seriously restrict possible development and may increase building costs to a marked degree. Careful evaluation and wise selections among sites available are important steps in securing maximum value for projected funds.

75.25.00 COST AND DEVELOPMENT OF SITE:

75.25.01 Site costs actually should include both purchase price and development costs. Failure to consider development of a site could be a very costly oversight. Factors of site development should be considered on an individual basis. The architect, in cooperation with site preparation specialists, can provide reasonably accurate estimates on all facets of site preparation required. A cost comparison table should be prepared on each of the favored sites being considered. Preparation costs plus acquisition costs give a reasonable estimate of costs involved and a more rational basis for choice.

75.25.02 A list of considerations in site preparation should include but not be limited to the following areas:

Clearing and grubbing
Demolition and removal
Earthmoving
Drainage on Site
Underdrainage
Underground electrical service
Athletic facilities
Playground areas
Transportation cost differences
Storm drainage
Water supply
Sewage disposal
Engineering boring
Sodding topsoil
Walks, drives, parking
Fencing, gates
Noise and pollution control
Building orientation

75.26.00 REMODELING EXISTING SCHOOL SITES:

75.26.01 A careful survey of individual sites is necessary before any serious discussion of possibilities for remodeling the landscape can be entertained. A consultant fee to an ornamental horticulturist is a good investment where landscapes are bare or drab. Paved walks and drives add much to an established site. Concealing unsightly areas with blinds or landscape greatly improves general appearance. Noise may be dampened by fast growing shrubs and trees. An artificial level of earth, covered with vegetation provides both a barrier and noise control function. Functional lighting of buildings, walks, and drives adds to the aesthetic value and tends to reduce vandalism. Excavations from a swimming pool or a pond used in ecology and biology studies could be piled to provide a mound for run and play. An unused portion of the site may be developed to be utilized as a picnic area, designated as senior class lounge area or other recreational use.

75.27.00 SUMMARY:

75.27.01 There are two distinct attitudes concerning school site selection and development. One view is to let all school planning be a function of the autonomous board of education or school administration. The other view is that community planning and school site planning go hand-in-hand. Whatever method may be used the Plans and Surveys Section of the State Department of Education must approve sites before state funds can be spent, directly or indirectly. Site approval carries with it authority for construction because terminative plans for the site are part of survey considerations. It is advisable to invite the survey team to visit before any plans are formulated for purchase. This is done by a letter to the State Superintendent of Education requesting the survey team's action. Services of this nature are of no cost to the school.

75.27.02 A suggested list of items that should be considered in site selection and development are listed below. This is not meant to be arranged in any priority or to be a limited list.

1. Size and Shape--adequate for present and future
2. Center of pupil population
3. Avoids traffic, odor, industry, smoke, noise
4. Accessibility
5. Utilities available
6. Soil suitable to build
7. Cost is reasonable
8. Contour drainage
9. School and community programs now and future
10. Environment considerations
11. Topography
12. Aesthetic appeal
13. Zoning and regulations
14. Preservation of vegetation
15. Proximity to other educational and recreational facilities
16. Proximity to safety facilities

17. Suitable for construction
18. Ample parking area
19. Industrial commercial expansion
20. Orientation to climatic conditions

75.28.00 EDUCATIONAL SITE SELECTION EVALUATION:

75.28.01 It is desirable to have several parcels of land available for consideration as an educational site. The educational planner uses an impartial method to equitably evaluate parcels under consideration. It may be advisable for board members and other interested persons to apply such an equitable evaluation to sites, rating them in an order of priority. The following site selection grade sheet may be used as a guide to evaluate land as a potential educational site.

			Possible	Your Score
75.28.02	1.	Environment:		
		Freedom from noise	25	
		Freedom from odors and dust	25	
		Freedom from airport, railway, and highway	25	
		Character of adjacent property	25	
		Total	100	
75.28.03	2.	Size of Site:		
		Meets minimum standards (for acreage)	100	
		Area for expansion	100	
		Total	200	
75.28.04	3.	Characteristics of Site:		
		Aesthetic value (fits the plan)	30	
		Shape of site (square or rectangle desirable)	30	
		Current Use (free of structures)	30	
		Vegetation and elevation	30	
		Adaptability to conventional construction	30	
		Total	150	
75.28.05	4.	Accessibility		
		No dangerous gradient	40	
		Safe entry and exit	40	
		Accessible to bike riders	20	
		Travel distance for students	20	
		Sized for adequate parking	30	
		Total	150	

75.28.06	5.	Community Planning		
		No conflicting zone ordinance	25	
		Acceptable to community	25	
		No proximity conflicts	25	
		Has family recreation potential	25	____
		Total	100	
75.28.07	6.	Utility		
		Proximity to electricity	20	
		Proximity to water	20	
		Availability of sewers	20	
		Availability of telephone	20	
		Availability of heat source	20	____
		Total	100	
75.28.08	7.	Costs		
		Costs of land	50	
		Costs to prepare site	25	
		Cost of utility connections	25	____
		Total	100	
75.28.09	8.	Educational Suitability		
		School board approval	25	
		Integrates with facilities plan	25	
		Will accomodate provisions of educational specifications	25	
		Personal acceptance	25	____
		Total	100	
		TOTAL	1000	

75.28.10 9. Results of Grading should be evaluated as follows:

500 points or less - site undesirable
500 - 800 points - site desirable
800 - 1000 points - site highly desirable

75.30.00

Chapter III
Facility Planning

75.31.01 The planning and construction of a school building would represent the zenith of building perfection, if the number of people involved in planning were the determinant. School construction is one of the most planned, supervised and controlled construction projects in the building industry. The ultimate value of goods and services is realized through the careful evaluation of every aspect of the school construction and utility. Every dollar of public trust money spent on construction, is carefully evaluated by a host of interested people, local and state.

75.31.02 It is no problem to build an expensive school, or an inexpensive school. The economical school presents a real challenge to educators and architects. To build the right size school for the available funds becomes the challenge and responsibility. Economical schools represent a unified planning effort and no one factor of planning, innovation of construction, technology or other system will produce an economical school. It is a unified and planned effort of those professionals and paraprofessionals concerned with learning to produce desired goals.

75.31.03 Building costs should not be measured in terms of initial cost only. A more realistic measurement is by determining cost plus maintenance and operations over an extended period of time. Maintenance free materials and finishes may represent a considerable savings over the expected life of the facility. National comparisions, compiled by the American Institute of Architects, are available for a cross-check and reference.

75.31.04 Good school design begins when architects and educators respect the talents of each other and rely on these as strength in unity of purpose. **Selection of an educational planner and architect should be a first step in considering a building or renovating program.**

75.31.05 Many school boards having delayed in acquiring school sites because of funds, found that when the needs were pressing, no fully suitable site could be purchased. The most costly school sites are those bought when the new school is desperately needed. School boards have the right to buy, sell, hold and trade property under the auspices of the State Superintendent of Education. This right should be used when needed to provide for long range development. The stress is not to delay acquiring options for a reasonable expansion of property.

75.31.06 Errors in the planning, or lack of planning, of educational facilities usually have far reaching consequences. **Seven of the most common errors in planning are enumerated below**. Care should be exercised to avoid these errors.

75.31.07 A. Failure to secure recommendations and suggestions from teachers, principals, pupils, custodians and community groups as an organized part of the preliminary planning procedure.

75.31.08 B. Failure to secure the services of an educational planner in the early stages of planning.

75.31.09 C. Selecting an architect for reasons other than demonstrated competence in design of facilities is a serious error.

75.31.10 D. Probably the most common of all errors is that of failing to allow sufficient time for planning activities.

75.31.11 E. Failing to provide the architect with complete and detailed educational specifications.

75.31.12 F. Allocating a specific amount of money for individual projects before the educational needs are determined.

75.31.13 G. Planning the building with little or no attention to the other facilities that make up the total school plant.

75.31.14 The following might be used as a **general checklist for planning a facility**:

1. Comprehensive survey and development of overall, long-range educational plans, including facility requirements.
2. Selection of an educational planner.
3. Selection of an architect.
4. Development of educational specifications.
5. Schematic plans and Planning Program approved by the local board of education and by the State Superintendent of Education.
6. Development of preliminary plans and outline specifications.

7. Approval of preliminary plans by the State Superintendent of Education, or his legal representative, the School Architect.

8. Develop working drawings and specifications.

9. Approval of final plans and specifications by the State Superintendent of Education, or his legal representative, the School Architect.

10. Advertise for bids.

11. Award the contract.

12. Request periodic and final inspection by the State School Architect.

13. Final acceptance of the building by the State Superintendent of Education.

75.31.15 To assist in understanding the complexity of planning the educational facility, the following section deals with persons in positions of responsibility in development and construction of a school facility.

75.32.00 The Educational Facility Planner

75.32.01 Every professional person in education, whether a teacher, principal, superintendent, or chief state officer, is, or should be, involved in some form of educational planning. An educational planner collects, analyzes, and synthesizes data as a basis for proposing alternative plans for an educational institution. The planner has a working knowledge of both the educational system and those systems related to it and ultimately with the relationship of the system to society.

75.32.02 Planning is either a part of or prelude to a decision-making process, a process whose province includes the understanding of and influence of change. Planning is concerned with: (1) what ought to be; (2) what ought to be done; and/or (3) how to go about doing it or getting it done. With respect to the latter, it can also be concerned with questions of feasibility, alternatives, strategies, and implications of given policies and decisions.

75.32.03 The planning function is a management one, and the educational planner works directly with executive decision-makers in providing them with a range of alternatives and consequences based upon objective data, informed estimates and projections, and always with a goal-objective orientation.

75.32.04 The planner's concern is with recognized and accepted goals and with systematic relationships, including, of necessity, societal relationships.

The educational planner must have a working knowledge of the nature of these goals he works to achieve, as well as how to achieve them. He cannot be concerned with planning for the sake of planning. Rather, the planning process and the tools it employs must always be seen as a means to an end.

75.32.05 It is essential for planners to relate their work to that of a larger whole (or system). Planners at all levels make an imformed attempt to project possible consequences of proposed plans and such consequences should not be limited to short or middle range effects.

75.32.06 The educational planner must be concerned with comprehensiveness. Inter-system and intra-system interactions and relationships must be considered and analyzed. Without such an approach, maximum coordination and comprehension is unlikely.

75.32.07 In summary, educational planners are those who: (1) have as their major responsibility and consideration individuals, who collectively, the system is designed to serve; (2) are concerned with and skilled in working with goals and objectives for both the larger society and the educational system and its relationship to that society; (3) have as their province the understanding of change and innovation; (4) develop and apply systematic approaches to support decision-making; (5) develop processes which enable contingency and short-range operations to complement long-range goals and objectives of education; and (6) facilitate the planning process through incorporation of evaluative mechanisms to insure that the educational endeavor relates to its goals and purposes.

75.33.00 LOCAL SUPERINTENDENT

75.33.01 **Comprehensive Education Survey.** Secure the services of an educational planning team to perform a comprehensive educational survey of the entire educational system. Specific interests may be reflected in the survey. The survey may be used as justification to request expansion, consolidation or abandonment. Surveys are used as justifications for court decisions in some cases. The comprehensive survey will represent an assessment of the educational system. The reputation and capability of the planner are factors to be considered in securing the services of the planner.

75.33.02 **Request complete site and center approval.** If the project is a new school, the center has to be determined and approved as the result of a current school survey. A new site has to be approved by members of the Plans and Surveys Section of the State Department of Education. If a new site does not have access to a sanitary sewer system, approval of a system of sewage disposal should be obtained from the State Health Department prior to purchase of the site.

An Alabama State Board of Education resolution adopted December 29, 1975, states that all new construction of school facilities shall take place only at approved school centers as classified by the Plans and Surveys Section of the Alabama State Department of Education, and approved by the State Superintendent of Education, and that all new construction, renovation of and additions to existing school facilities funded from local, state, or federal sources shall have the approval of the State Superintendent of Education.

An addition to an existing building can be made only to a building that is approved for permanent use. This approval is also determined as the result of a current school survey.

75.33.03 Court Approval. This approval is the first requirement that must be met before any phase of school construction can be permitted. Request for approval by the local superintendent is made to the State Superintendent of Education in writing, outlining needs for new facilities, additions to existing facilities or whatever the need might be, along with a statement of justification for need and intended use of the proposed facility as well as the type of funding. This approval must be received before starting any phase of the planning program.

75.33.04 **Selection and Employment of Architect.** A detailed list of suggestions for selecting an architect is included as another section of this presentation.

75.33.05 **Agreement Between Owner and Architect.** On projects funded with **local or federal funds**, the Agreement between Owner and Architect is negotiated on form SDE-1 approved by the State Board of Education, sample copies for duplication to be furnished by the School Architect. The approved fee schedule is included as part of the Agreement. **Four copies of this Agreement**, signed by the Project Architect and Local Superintendent, are submitted to the School Architect for checking and securing the signature and approval of the State Superintendent of Education. After his approval has been given, one copy is retained by the School Architect's Office, one copy is forwarded to the Owner, and two copies to the Project Architect. The Building Commission receives a copy from the Project Architect for their information only and is not required to approve the Agreement between Owner and Architect for locally or federally funded projects.

75.33.06 **Development of Educational Specifications.** These are written statements of requirements to be provided for in the completed facility. The completed educational specifications are directions to the architect to use in designing the project.

75.33.07 **Schematic Plan and Planning Program Submittal.** Schematic plans are simple line drawings of the proposed plan including all buildings on the site and are usually done at a small scale. This type study is more important for a new building or a complex plan where much thought and study is required by the architect. After approval of the schematic plans by the superintendent and members of his board, the architect submits one copy to the School Architect and one copy to the Building Commission for review and approval. **In addition, one copy of the schematic plans must be submitted by the architect to the respective consultant or supervisor of the State Department of Education for review and approval of the following facilities:**

Kitchen & Cafeteria	School Food Services Section
Science	Basic Science Section
Library Media	Language & Fine Arts Section
Home Ec. & Cosmetology Education	Division of Vocational Education and Community Colleges
Vocational Building Construction & Equipment	Support Data Branch --Division of Vocational Education and Community Colleges

A copy of the written educational specifications should be submitted with the schematic plans. After written approval is given to the schematics, the architect may proceed with development of the preliminary plans and outline specificiations.

An Alabama State Board of Education resolution adopted on September 20, 1974, states that all plans for all construction for the institutions under the direct supervision of the State Board of Education shall be approved by the State School Architect and no building shall be constructed without said approval. The intent of this resolution is that the State School Architect be consulted in the very beginning of the planning of all construction projects. The State School Architect is to assist the institution and Its Project Architect in the development of a planning design program for each particular project.

75.33.08 **Preliminary Plans and Outline Specifications.** These plans are developed in more detail and at a larger scale than the schematics. Submittal and approval requirements are the same as for schematics.

75.33.09 **Final Plans and Specifications.** These are the detailed documents used by the contractor for actual construction of the building. Submittal for review and approval is the same as for preliminaries with the exception of the Building Commission requiring two sets in lieu of one. After approval of the final plans and specifications by the School Architect and the Building Commission, the architect proceeds with the advertising for bids.

75.33.10 **Advertisment for Bids**. The architect will prepare an advertisement for bids which will be **placed in your local newspaper for three consecutive weeks**. The period of time given for receiving bids is determined by the size of the project.

75.33.11 **Receiving Bids**. Bids are usually received in the office of the local superintendent or any other designated location. They are usually opened and read aloud by the project architect. If a low bid is received that is within the budget, an award of contract may be made at that time. If the low bid exceeds the budget, all bids may be rejected and the job can be readvertised or the project architect can negotiate with the low bidder and by deleting various items, reduce the cost within the budget. All contractors bidding on projects exceeding $20,000.00 in cost must be licensed by the State Licensing Board for General Contractors and must be bondable for the cost of the project. A bid from any unlicensed contractor must be rejected.

75.33.12 **Agreement Between Contractor and Owner**. On projects funded with local or federal funds, the Agreement is negotiated on forms approved by the State Board of Education and copies for duplication are furnished by the School Architect. In addition to the Form of Contract, "Agreement Between Contractor and Owner," SDE-2, bond forms are furnished for "Performance of the Work," SDE-3, and for "Labor and Material," SDE-4. These three documents along with a copy of the Power of Attorney, constitute a complete set of the construction contract. **Five copies of these contracts**, signed by the contractor and local superintendent, are submitted to the School Architect for checking and securing the signature and approval of the State Superintendent of Education. After his approval has been given, one copy is retained by the School Architect's Office, one copy each is forwarded to the Owner and Contractor, and two copies to the Project Architect. The Building Commission receives a copy from the Project Architect for their information only and is not required to approve the Agreement Between Contractor and Owner for locally or federally funded projects.

75.33.13 **Notice to Proceed**. This is a notice to contractor to proceed with work on the project and is prepared and presented by the project architect. It should not be given until after the construction contracts are approved.

75.33.14 **Change Orders During Construction**. When it is desirable or necessary to make changes to the contract, the project architect negotiates these changes with the contractor and prepares the **change order in five copies. All five copies are to be sent to the School Architect's Office, with a letter of explanation, for his approval**. After the School Architect's approval has been given, one approved copy each is forwarded to the Owner and Contractor and two approved copies to the Project Architect with one approved copy being retained by the School Architect's Office.

75.33.15 **Monthly Payments to the Contractor.** After construction begins, the contractor will submit to the project architect an estimate of work completed at the end of each month. It is the responsibility of the architect to check this estimate against actual work done and the amount of material or equipment on site and to determine if the amount of money asked for by the contractor is justified. If the project architect approves this estimate, he then forwards copies to the local superintendent authorizing payment to the contractor for the approved amount. **An amount of 10 per cent of the estimate is always retained from each monthly estimate, this 10 per cent being retained as final payment.** The 10 per cent will be shown on the estimate and the exact amount due the contractor will be designated.

75.33.16 **Supervision of Construction.** Contracts with the project architect should include supervision of the construction by him. Inspections should be made at least once a week, depending on the stage of work. He should keep in personal contact with the local superintendent's office after each inspection, especially if any problems arise. He should also provide a written record of each inspection. Special inspections or checks of construction will be made by the State School Architect at the request of the local superintendent.

75.33.17 **Final Inspection.** On locally or federally funded projects a final inspection of the project by the School Architect, or his designated representative, is required at the completion of construction. The project architect is to notify the School Architect prior to scheduling this inspection. A list of deficiencies is made by the project architect at this inspection and is compiled into a Final Inspection Report transmitted from the project architect's office, one copy each being forwarded to the Contractor, the School Architect and to the local superintendent. After the contractor corrects all items on this Final Inspection Report to the approval of the project architect and local superintendent, the project architect is required to certify in writing to the local superintendent that the project is complete in every respect, and send a copy, bearing the local superintendent's approval, to the School Architect. **This must be done before approval for final payment can be authorized by the State Superintendent of Education.**

75.33.18 **Final Payment.** Authorization for final payment to the contractor must be given by the State Superintendent of Education. This is done by a letter from him authorizing payment to be made. Authorization is given only after receiving the above mentioned certification from the project architect, with the local superintendent's approval. Prior to actual final payment, the architect obtains from the contractor all warranties of equipment and other guarantees that will be involved and presents them to the local superintendent for permanent record and file.

75.33.19 **Final Payment**. The final payment to the contractor by the local superintendent of education is the actual closing-out of the job. There is a one-year guarantee on work and the contractor is responsible during that time to correct anything that was covered in his contract. The contractor must advertise in accordance with Section 16, Title 50, **Code of Alabama** 1940.

75.33.20 **Year-end Inspection**. A Year-end Inspection should be made by the architect in the presence of the contractor prior to expiration of the year warranty. A list of items to be corrected, if any exist, should be turned over to the contractor for correcting.

75.33.21 **Check List**. The above listed procedures should be helpful as a check-list when beginning a program of planning for school construction. This is not an answer to all questions or problems that might arise during such a program. If assistance is needed in any phase of facility planning or construction, please feel free to call the School Architect's Office.

75.34.00 PROJECT ARCHITECT

75.34.01 **The Project Architect** serves the important function of picturing the planning group's ideas and desires in sketches, drawings, and outline specifications.

75.34.02 **Selecting an Architect**. Selecting an architect must be done in an objective, impersonal manner.

75.34.03 **Qualifications.**

1. It is important to secure an architect with education and experience that will be useful in the planning of an educationally sound school building. An architect specializing in school building construction projects should profit from his experiences in building other school structures and can assist the school staff in determining educationally useful features in the new building.

2. He should be able to design school buildings in terms of a specified program of education.

3. He should plan buildings which are economical in terms of useable space, construction costs, and maintenance costs, and at the same time not sacrifice utility, appearance, or durability.

4. He should be able to prepare plans and specifications which are clear and complete.

5. He should be a competent executive in drawing contracts, investigating bidders, and coordinating the work of contractors.

6. He should provide or secure all engineering services. His staff should be able to provide supervision during construction.

7. He should have a good reputation in all personal and professional dealings.

75.34.04 Suggestions for the Selection of an Architect.

1. Investigate and consider the quality of his services rendered in the past.

2. Visit and inspect buildings which he has designed and if possible talk with clients regarding services rendered to him by the architect.

3. Consider present commitments of his office.

4. Consider his reputation with past clients, representatives of the community, professional consultants and members of his own profession.

5. Consider his ability to work with contractors and other construction people.

6. Investigate and consider his ability and past performance regarding inspection service during construction.

7. Consider his attitude and willingness to work with you and your staff and all others to be involved in the planning. An architect with a closed mind and all the answers should be avoided.

8. Consider his office organization as to qualified staff. The size of an organization does not determine the quality of work produced. The best planned buildings and the closest supervised projects often are done by the smallest offices.

9. Political ties or family relation should not be the deciding factor in selecting an architect.

10. Consider distance between your office and architect's office if he is from another location. The architect or his representative should be readily available and easily accessible at all times.

11. Architects should **never** be selected on basis of fee cutting! Fees are standardized for a purpose, making it cost the same for architectural services whether you employ the best or the worst.

12. Have architects that you are considering for employment to meet with you and your board.

13. Prior to entering into contract with architect, discuss and have understanding with him regarding all terms of the contract, have understanding regarding consulting engineers, inspections and inspection reports and any other questions that you feel should be clarified before employing the architect.

75.34.05 Underestimating the Architect's Services.

Underestimation of the nature and value of his services is indicated by the following practices:

1. Delay in employing the architect until the building budget is set.

2. Employment of the architect because of place or residence, club or church affiliation, or other factors unrelated to professional competence.

3. Attempting to bypass architectural service altogether and let a "practical contractor" build the school.

4. Showing the architect a complete plan or an existing building and directing him "to plan one like that."

5. Attempting to secure his services for less than the going fee.

6. Contracting with him for production of drawings and specifications only and leaving supervision during construction to someone else.

7. Employment of the unprofessional architect who makes the most alluring promises regarding low cost of construction when his plans are used.

8. Employment of the over-zealous architect who brings to his first conference the best looking "solution" to the building problems of the district.

75.34.06 Overestimating the Architect's Services.

Overestimating the architect's service leads to the following mistakes:

1. Employing him and giving him the entire planning and even the policy-making responsibility.

2. Assuming he is competent in all forms of specialty engineering and does not need assistance from structural, mechanical, acoustical, and other engineers.

75.34.07 **Services of an Architect.**

1. If the architect is employed prior to selecting a site, let him work with you on deciding which site to purchase.

2. He should be in all committee meetings and discussions pertaining to any phase of design of the project.

3. Trips with the architect and board members should be made to new schools comparable to the one proposed by you. Much can be gained by this type trip in deciding such things as structural systems, finishes, types of equipment, construction details, materials to use and not use, desirable and undesirable plan features, etc.

4. Make detailed studies of site proposals as to soil structure and topographic relationship, space requirements, residential harmony of school plant, and relation to utilities.

5. Provide the architect with a written program of complete scope of the project, listing all facilities desired, approximate or minimum areas of each, enrollment figures, total construction cost in budget, etc. -- education specifications.

6. Have the architect present and discuss all preliminary sketches as work progresses. As plans are developed, staff members and others should be used in reviewing plans and making suggestions as to changes and improvements. Final approval of the planning design program and the schematic plans and the preliminary plans and outline specifications should be made by all of the local board members.

7. After schematic plans have been approved by the local board one copy each must be submitted to the School Architect and the State Building Commission for their review and approval or suggested changes. These approvals should be received prior to permitting the project architect to begin preliminary plans.

8. After preliminary plans have been approved by the local board, one copy each must be submitted to the School Architect's Office and the State Building Commission for their review and approval or suggested changes.

These approvals should be received prior to permitting the project architect to begin final plans.

9. Secure the written approval of the board of education of final revision of the preliminary drawings and proceed with the preparation of the working drawings and specifications.

10. Confer with the architect during development of final plans and specifications to be assured that plans are including all features which have been requested. Have architect to go through completed plans and specifications and have a complete understanding of entire job prior to approval of plans by the local board.

11. After the local board's approval, a copy of final plans and specifications must be submitted to the School Architect of the State Department of Education and the State Building Commissiorr to be approved by these agencies prior to advertising for bids. Secure written approval of working drawings and specifications from the School Architect and State Building Commission and from government agencies as required by law.

12. Prepare advertisements for bids, having cleared with the local board of education whether they wish to have lump sum bids or separate bids submitted.

13. Assist the local board of education in reviewing the bids and arriving at an award, at least in submitting technical advice regarding the bids.

14. Effect and administer forms of contract, the posting of necessary bonds including the contractor's performance bond, and the time schedules for various completion stages of the building.

15. Approve selection of supervisor, inspector, or clerk-of-the-works to supplement the supervisory services of the architect and to provide personal supervision of construction at critical stages of the building.

16. Act as moderator between the local board of education and contractor in case of disputes.

17. During construction, architect should keep the local board of education informed as to progress of job, both by conferences and written inspection reports.

18. Approve and certify all payments to contractors and subcontractors.

19. Architect should not permit final acceptance of building until all requirements of the plans, specifications and contracts have been met.

20. Inspect building upon completion and certify to the local board that all bills and other obligations have been completed.

21. *Turn over two sets of "As Built" documents to the Owner, according to* Article 11 in the Architect-Owner Agreement.

75.34.08 Architect's Compensation

The architect is usually compensated for basic services in one of the following methods:

A. A percentage of construction cost of the work.

B. A professional fee plus reimbursement of expenses.

C. A multiple of direct personal expense.

D. A salary, per diem, or hourly rate.

75.35.00 STATE SUPERINTENDENT OF EDUCATION

75.35.01 The State Superintendent, as the chief executive officer of the State Board of Education, has the responsibility to enforce the directives of the board and those applicable laws as may be enacted by the state legislature and other certain directives of federal agencies. The Code of Alabama, Title 52, chapter 4, defines these responsibilities. The State Superintendent executes the educational policy of the State Board of Education. Orders of the State Superintendent are binding upon local or county educational systems.

An abbreviated list of responsibilities of the State Superintendent as pertains to school construction are listed below:

A. Enforce court orders
B. Evaluate all educational centers
C. Evaluate all school sites
D. Evaluate all facility plans
E. Evaluate contracts and change requests
F. Inspect and evaluate construction
G. Grants authorization to the local superintendent for final payment to contractor.

75.36.00 THE STATE SCHOOL ARCHITECT

1. Serves as consulting architect to the State Superintendent of Education and is his authorized representative for school facility planning.

2. Serves as liaison architect between Superintendent of Education and private architect.

3. Assists Plans and Surveys Section on school surveys and in other related work. Assists on school site selection and approval.

4. Checks all contracts between owner and architects for approval by State Superintendent of Education.

5. Reviews all schematic plans and planning design programs and all preliminary plans and outline specifications for schools and writes recommendations for changing and improving plans. Makes use of professional staff members and consultants on review of special areas and coordinates their recommendations into one review which is directed to the superintendent and architect. This approval must be given before final plans and specifications are begun by the architect. This includes projects financed with local, state or federal funds.

6. Reviews all final plans and specifications and writes review to superintendent and architect. **This approval is required prior to architect advertising for bids.**

7. Attends and assists in bid openings at the request of the superintendent or project architect.

8. Checks all contracts between owner and contractor in preparation for approval by State Superintendent of Education.

9. Makes periodical construction inspections at request of local superintendents.

10. Checks and approves change orders during construction of project.

11. Makes final inspection of completed construction projects with project architect prior to acceptance by owner.

12. Prepares letter of authorization of final payment for State Superintendent of Education to local superintendent of education at completion and acceptance of job.

13. Makes special inspections of existing buildings for determining condition of building for continued use, for renovations, additions, etc.

14. Attends out-of-state and in-state conferences on school facility planning to improve knowledge of new design concepts.

15. Available for participating in planning of workshop type conferences to promote ideas and information to superintendents and architects on school design.

75.37.00 SITE AND SURVEY

75.37.01 The Plans and Surveys Section is primarily concerned with interests in school sites and their conditions. Members of the staff or team are deployed to local school districts at the discretion of the State Superintendent of Education. The Plans and Surveys Section acts as a representative of the State Superintendent for the interest of the local school district to achieve a greater degree of site and facility utility.

75.37.02 When a school district desires new construction, a population survey, an inventory of educational facilities or assistance in planning educational facility additions, it is advisable to submit a written request from the local board to the State Superintendent of Education for survey team assistance. The minutes of a board meeting should reflect this request. Upon the State Superintendent's approval of the request, the Plans and Surveys Section coordinates with the local board for a visit.

75.37.03 The team cooperates with the local school system to render whatever assistance may be requested within team and staff capabilities. The ideal condition is to render a complete survey. This survey is to complement, not replace, the comprehensive survey as outlined in Chapter I. The complete site survey involves:

A. Needs assessment
B. Aspects of consolidation
C. Aspects of expansion
D. Population identification
E. Site and facility conditions

75.37.04 **Resonable criteria for a minimum school** should be on the basis of 28-30 pupils per teacher in A.D.A. with a minimum of one teacher per grade for elementary schools (grades kindergarten through eight); a middle school of four grades shall have a minimum of six teachers; six teachers for junior high schools (grades seven through nine or two teachers per grade for any combination of grades seven through nine); and six teachers for senior high schools (grades ten through twelve). This would require 200 pupils or more in A.D.A. for an elementary school (grades kindergarten through six) or 270 pupils in grades kindergarten through eight; 175 pupils in middle school (grades five through eight); 175 pupils for a junior high school (grades seven through nine); 175 pupils in senior high school (grades ten through twelve) and approximately 350 pupils for a six-grade accredited high school (grades seven through twelve)--all in centers where the enrollment is constant or increasing.

75.37.05 The completed survey is a three-part document submitted to the local board of education and consists of the following:

75.37.06

Chapter I: Statistical Report

This chapter deals with the populations served by the school system. Charts will reflect enrollment by grades, past and present. A table of population is also a part of this chapter, reflecting the population trends. Shifts in population within a school district are not reflected. A general population summary and narration reflects aspects of the population projections.

75.37.07

Chapter II: Buildings and Sites

Buildings are thoroughly inspected and classified as to use:

A. permanent
B. temporary
C. abandoned

75.37.08 The educational site is surveyed and inspected. The results are categorized into three classifications:

A. permanent - meets all standards
B. temporary - factors involve site, size, shape, condition, development, grade and use
C. abandoned - this classification describes its existing status or the recommendation of the survey team.

75.37.09

Chapter III: School Centers and Recommendations

This narrative description of each school is a valuable tool used by the educational facility planner and administrator. The description includes historical data and significant information about each facility. The emphasis is on current condition and use.

75.37.10 When the survey is complete, the results are presented to the local board and copies distributed at that time. Permanent copies are maintained in the Plans and Surveys Section, State Department of Education.

75.37.11 When new construction is planned, it is advisable to obtain the services of the Plans and Surveys Section, State Department of Education prior to land purchases.

75.38.00 CONSULTANT SERVICES

Professional educators skilled in the art of rendering consulting aid and services are available to the educational system as a free service of the State Department of Education.

75.38.01 Consultants

a. Science
b. English
c. Reading Laboratory
d. Math
e. Social Studies
f. Modern Foreign Language
g. Industrial Arts
h. Art
i. Speech and Drama
j. Music
k. Handicapped Persons
l. Home Economics
m. Vocational Agriculture
n. Trade and Industrial Education
o. Library
p. Food Service
q. Physical Education
r. Guidance
s. Exceptional Children
t. E.T.V.
u. Civil Defense
v. School Bus Shops
w. Driver Education
x. Distributive Education
y. Business Occupations
z. ROTC

75.39.00 STATE AGENCIES INVOLVED IN APPROVAL OF SCHOOL PLANNING AND CONSTRUCTION

75.39.01 1. State Building Commission
  a. Required by Law: (Titles 55, 52 & 56)
    1. To promulgate, distribute and enforce Code of Minimum Building Standards. Includes all State buildings and construction, schools, hotels and moving picture theaters.
  b. Review and approve plans.
  c. Make inspections.

75.39.02 2. State Health Department
  a. Approve sites and proposed additions to existing schools for water supply and sewage disposal.
  b. Approve food service areas.

75.39.03 3. Fire Marshal

   a. Makes inspections for fire safety regulations.

75.40.00 Chapter IV

Educational Facility Dimensions

75.41.01 The general emphasis of space allocation in this chapter is primarily on facilities for problem-solving, inquiry, and experimental learning as opposed to the more traditional lecture-recitation-textbook process. Yet those curricula of a traditional orientation will not be limited through use of specifications in this chapter.

75.41.02 Individual learning in a societal environment is a principal feature of current educational facility planning, and is so expressed in this handbook. Ideas, concepts and plans presented in this chapter have been compiled as a result of research, consultation and experience. It is hoped that with the proper application, Alabama's school may become the model that is desired.

75.41.03 Changes in educational philosophy, programs, and methodology during the last decade have demanded increased flexibility, resulting in provision for open spaces with portable visual dividers being used instead of permanent or operable walls. Abandonment of interior walls permits arrangement of furniture and equipment into any plan and for any group size that is feasible for the program activity. During the last ten years considerable attention has been given to physical environment in order to provide optimum conditions for learning. Attention is given to compactness, reducing perimeter without decreasing inside areas, consequently releasing more money to be used on the inside of the facility. What is done with the teaching space determines, to a considerable extent, the type of program most easily implemented.

75.41.04 Architecturally, school buildings of the twentieth century have progressed from a series of one-room schools with one or more stories, through the sprawling finger type campus plans devised to enable classrooms to get more light and air, to the circular or polygonal buildings which help to break up the massiveness of yesterday's buildings.

75.41.05 Of all activities people engage in while living and working together, perhaps none expresses in material form so many aspects of our culture as schoolhouse constructions. A growing national concern for improvement of education is one of the most pronounced phenomena of our time. Educators in every corner of the nation have examined educational processes, realizing the future of this nation and the free world depends in large measure on excellence in education.

75.41.06 One cannot help feeling change in the tempo of our education programming. One distinguishing characteristic of all activities today is continuous change. A never-changing school facility gives a good indication that programs within are "dead," or have never been "alive." In order to provide for a living, dynamic, and effective educational program, a flexible plant containing teaching areas or spaces needed to implement varying programs must be provided. Educational programs must change; consequently, the facility housing each program must be flexible in order to implement change. The ferment of ideas in education affects every feature of the school plant; namely, flexibility, furniture, equipment, thermal control, acoustical control, visual and color control. Since buildings are of a permanent nature and have a direct and definite influence on educational processes, educational leaders are concerned about designing buildings to meet future as well as present educational needs.

75.41.07 School building design is changing, and for good reason. Today's school planners and architects, with the aid of the teaching staff, are planning buildings around programs to be carried out. With spiraling construction costs, there is a trend toward compact buildings to reduce the perimeter of outside walls, roof area, mechanical systems and travel distances. Reducing amount of space saves dollars for treatment of those conditions inside structures affecting learning.

75.41.08 Special concern is focused on flexibility in school planning as an important element of the learner's physical environment. Webster defines flexibility as something capable of being bent; susceptible to modification or adaptation; willing or disposed to yield or change. A flexible facility is adaptable, serviceable, changeable, functional, and/or mutable in the area of education. Flexibility makes it possible to adapt to conditions not already existing in a facility. Desirability of flexible facilities has been demonstrated conclusively in numerous studies. Individuals concerned with educational well-being of people need to be cognizant of the potential of flexible school facilities.

75.41.09 Flexibility offers one vehicle providing better educational results. Flexibility of spaces dictates use of serviceable walls or visual dividers in the form of moveable bulletin boards, tackboards, chalkboards, and storage cabinets. Use of these dividers may permit total utilization of each area to provide a desirable teaching and learning environment. Open spaces, wedge-shaped rooms, highly utilized spaces, operable interior walls, and adaptable furniture are no longer dreams but realities for students. A school building is flexible, serviceable, adaptable, and/or functional when a total school program is implemented providing optimum conditions for teaching and learning.

75.41.10 **General spaces, common to most educational facilities are: (1) clinic or first aid room; (2) auditorium or little theater; (3) food service; (4) restroom facilities;**

and (5) custodial spaces. Conditions generally acceptable for each of these spaces are summarized below.

75.41.11 **Clinic or first aid room.** A clinic provides two services to the school. It is a place to administer first aid and, secondly, it is a place to isolate children who become ill during the school day. This second function is intended for short term use only, until parents can pick up the sick child. Separate areas within this space should be provided for boys and girls. Separate restrooms are also required.

75.41.12 **Auditorium or little theater.** Elementary schools should provide a children's theater designed to accommodate approximately **one-third of the enrollment.** This facility is for both instructional and recreational activities. Seating should be provided through carpeted risers. Middle and junior high schools should offer auditorium facilities seating about **one-third of the total enrollment in theater type seating.** Secondary schools should have an auditorium designed to accommodate the largest single class (i.e. freshman).

75.41.13 **Food Service.** Consideration should be given to satellite food service. When this system is used it is possible to reduce kitchen areas to those required for dishwashing and refrigeration. Eating may be done in classrooms in elementary school and in commons-dining areas in other schools.

75.41.14 **Restrooms.** State Health Department regulations must be followed. When school enrollments exceed approximately 250, it is desirable to disperse restrooms throughout the facility.

75.41.15 **Custodial Spaces.** Provisions should be made as indicated in Section 75.48.04 rather than being located in any surplus corner.

75.41.16 Environmental considerations for educational facilities have and are undergoing a continual change. A more extensive summary of these considerations is made in 75.52.00, but very generally these conditions should be available: the heating and air-conditioning system should have provisions for control of relative humidity; lighting controls should be such that a wide variety of lighting conditions can be utilized, including ability to darken areas for viewing projections.

75.42.00 PRESCHOOL — KINDERGARTEN

75.42.01 Perhaps no other age group has received as much attention by educators as the preschool age group in recent years. National and state programs are zeroing in on this age in an effort to better prepare the youngster for a full educational program. In recent years day care centers and preschool kindergartens have flourished because parents feel a need for children to make the transition from play to school.

75.42.02 Factors to be considered by the facility planner are as follows:

(1) Children move from individual play to group activities. Facilities must be designed to permit this natural progression of learning.

(2) The lower the age group, the smaller the group should be. There is no need to architecturally divide groups, but it is well to provide space for the completeness of a particular age group.

(3) Children learn from the peer group. Facilities so designed that children may observe an older group, or even another group in action will tend to promote a learning condition.

(4) Children of this age tend to have possessive rights to all property. They need areas to place personal objects such as outer garments, umbrella and other personal objects clearly understood as personal.

75.42.03 Facilities and equipment are needed to support the following indoor activities:

Block building
Clay modeling
Cutting and pasting
Dramatizations
Hopping and dancing
Library corner
Looking at movies
Music area
Painting and coloring
Radio and television
Scientific studies
Story-telling and reading

75.42.04 Outdoor facilities should be arranged and constructed to provide maximum activity and learning with a minimum hazard to safety. At this age, equipment may be stationary: bars, pipes and pits; with limited moving equipment: swings; jennys; or seesaws.

75.42.05 Full-day activities for the preschool age child require facilites for morning snacks, a meal, naps, and afternoon snacks. The general classroom area is usually the place for these activities. Space should be allowed for pallet or cat naps. It is likely that not all children will nap at the same time nor will all want to sleep for the same duration. This fact should be considered for isolating unique sleepers.

75.42.06 The location of the preschool area in relation to the other facilities of the school is an important consideration. Many parents may prefer to drive their child to school, consequently a location providing easy auto access is advisable. This area should never be located near the school parking lot or street area unless fencing is to be utilized. The location should be selected with consideration of outside noise and natural lighting configurations.

75.42.07 Only the ground level should be utilized for preschool activity. Windows should provide easy and direct views of the playground and entry areas.

75.42.08 Instructional areas for kindergarten students is a mixed world of all elements of play, work, class, socializing, snacking and other activities that complete the kindergarten curriculum. It is necessary for furniture to be of such a nature as to be easily arranged or rearranged as activities may dictate. Generally the teacher occupies from one-quarter to one-third of the area with desk, cabinets, and allied furniture. Kindergarten instructional areas are more like laboratories of action than the traditional lecture-recitation method of instruction found in some areas of the school. For this reason the teacher needs conference area apart from instructional space where the typical desk, cabinets and allied equipment may be located.

75.42.09 **Tables should vary in height from 15 to 22 inches while chairs are 8 to 15 inches.** These should be very sturdy yet light enough so as to be easily moved by the child. It is suggested to have easels, tack boards and book display areas for easy access. Chalk boards and tack boards should be low enough to be used by the child. Door knobs should be set for the height of the user. The work counter should be of a height to be convenient for the child. A deep sink with mud trap, hot and cold water should be used. A suggested counter work area is about 2 feet per child of a waterproof material with storage beneath. Grounded duplex electrical outlets spaced at four-foot intervals except over the sink is suggested. The instructional area should be acoustically treated so as to be protected from outside noises. Carpet is advisable for sound, sanitation, floor warmth and economy.

75.42.10 A personal cubicle for each child should be provided with a slight forward slope in the bottom for drainage of water from galoshes and raincoat. Provision should be made for a shelf to store flat materials in the cubicle. If the cubicles are color-coded, it will aid the child in identifying personal areas and aid in eliminating the urge to explore the neighbor's area of personal belongings.

75.42.11 Eating habits of preschool children are usually considered continuous. The teacher may attempt to regulate part of this constant snacking. However eating is managed, a kitchenette (or access to kitchen facilities) is considered vital to preschool programs for purposes of storing milk, beverages and snacks. Children of this age need a morning snack, lunch and afternoon snack. Even if food is prepared elsewhere and brought to the kindergarten, some facility for food storage may be necessary. It is not desirable to prepare food in the kindergarten area or wash dishes and trays in this area. Sanitation and audio distractions are factors of consideration. A closet for storage is essential for good housekeeping technique. Provisions for good ventilation should be made.

75.42.12 As a guide for toilet facilities, providing one toilet and one lavatory for each twelve children is recommended. It is suggested for a group of twenty, provisions should be made for a boy's and a girl's toilet. Standard fixtures are used in the home, so it is not essential to utilize special fixtures, but desirable. It is advisable to lower the lavatory height to accommodate the user.

75.43.00 ELEMENTARY SCHOOLS

75.43.01 Elementary students have exhibited traits that lend themselves to different modes and methods of instruction. Consideration must be given to:

(1) Open instructional programs (does not necessarily require open space)
(2) Individual and continuous progress programs
(3) Art and music programs
(4) Media centers (learning resource centers) as opposed to library
(5) Play shelter in lieu of a gymnasium (physical education activities may normally be accommodated through a play shelter). This play shelter should be attached to the main building, be screened from excessive wind, and have an all-weather surface. Storage for physical education equipment should be readily accessible to this facility. Drinking fountains should be available.
(6) Satellite food service

75.44.00 MIDDLE SCHOOLS

75.44.01 Middle schools have a variety of grade compositions. In one system it may be grades five through eight; in another grades four, five, and six; in still another system grades seven and eight. It becomes necessary for each system to define their use of the term.

75.44.02 Middle schools, regardless of their grade composition, have utilized instructional activities not found in traditional schools. Some concepts and ideas to be considered are:

(1) Open instructional programs (does not necessarily require open space)
(2) Individual and continuous progress programs
(3) Unified arts programs (combination of fine arts, home ecomonics, and industrial arts)
(4) Media centers (learning resource centers) as opposed to library
(5) Gymnasium (no spectator seating)
(6) Satellite food service

75.45.00 JUNIOR HIGH SCHOOL

75.45.01 May be composed of grades seven and eight but are more commonly grades seven, eight and nine. Traditionally, junior high schools have been a downward extension of senior high schools. As a consequence, these schools have not changed as rapidly as elementary and middle schools.

75.45.02 Junior high schools have begun to develop career education programs that are being reflected in both content and instructional methodologies in all instructional programs. As a result of this development (and several others) it is desirable to review the following points prior to design development:

(1) Open instructional programs (does not necessarily require open space)
(2) Individual instruction
(3) Large group (and varying group) size instruction
(4) Career education programs
(5) Media centers (learning resource centers) as opposed to library
(6) Gymnasium to seat no more than 50 per cent of total school enrollment in folding bleachers
(7) Satellite food service

75.46.00 SENIOR HIGH SCHOOL

75.46.01 Senior high schools usually encompass grades ten, eleven and twelve or grades nine through twelve. These schools are more traditionally oriented and have made limited but significant changes recently.

75.46.02 Senior high schools have and are developing a career education concept that is having a major impact on this level of public education. Coupled with changes in educational technology and methodology requirements for new facilities must be considered:

(1) Open instructional programs (does not necessarily require open space)
(2) Individual instruction
(3) Large group (and varying group size) instruction
(4) Open campus
(5) Media centers (learning resource centers) as opposed to library
(6) Gymnasium to seat no more than 50 per cent of total school enrollment (folding bleachers)

75.47.00 SPACE ALLOCATION

75.47.01 When a facility planner begins to designate space utilization for a specific or general purpose, many factors are to be considered. These may include the latest in building technology, the curriculum, the user, costs, the environment, available materials and hundreds of variables that are an input to the final decision of "what size." Guidelines for determining the size and space utilization factors have been developed as a result of research and experience.

75.47.02 It is the purpose of the following data to provide the planner a minimum and recommended space to conduct a specific or general activity. **These data should not be considered an absolute, but it is recommended that it be given utmost consideration in planning area factors.**

75.47.03 It is better to eliminate certain facilities, in an economy effort, than to reduce the overall program or dimensions of the facility. It is far better to maintain quality than sacrifice to quantity. Priorities should be established in order to more clearly identify areas that may be constructed in a second (or even a third) phase. It is urged that provisions for the following condition not be deleted or seriously compromised.

A. The safety, health and comfort of pupils and teachers.
B. The operational success of the educational program.
C. The protection of the investment in the building.

	ACTIVITY	STUDENT CAPACITY	AREA IN SQUARE FEET	
			MINIMUM	RECOMMENDED
75.47.10	**PRESCHOOL - KINDERGARTEN**			
75.47.11	GENERAL INSTRUCTIONAL AREA	20	900	1,250
75.47.12	SERVICE AREAS			
	Kitchenette		0	140
	Storage		100	140
	Rest room		50	60
75.47.20	**ELEMENTARY**			
75.47.21	GENERAL INSTRUCTIONAL AREA	30	900	1,100
75.47.22	ART EDUCATION			
	Instructional area Includes Materials Storage and clean-up area	30	1,000	1,200
	Display area		0	150
75.47.23	MUSIC			
	Individual practice rooms		Not Recommended	
	Instructional/Practice	50	1,200	1,500
	Instrument storage (Secured)		200	350
75.47.24	MEDIA CENTER - LIBRARY			
	Viewing	7	0	150
	Conference	12	150	200
	Darkroom	Not Recommended	0	100
	Maintenance/Repair		0	150
	Office		100	150
	Periodical Storage		125	175
	Reading/Browsing	*	25/stu	28/stu
	Recording	Not recommended	0	120
	Study Area	**	15/stu	20/stu
	Story Telling Pit	30	0	300
	Storage (General)	***	1	2
	Storage (Equipment)	***	1	2
	Production Area - Teachers and Students		200	250

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* Designed to accommodate 10 per cent of the total student enrollment as a minimum with accommodations for 15 per cent of the total student enrollment recommended.

** Seating for 5 per cent of the total school enrollment as a minimum with seating for 10 per cent recommended. Fifteen per cent of these units should be in individual study carrels.

*** Area in square feet times number of students media center designed to accommodate.

	ACTIVITY	STUDENT CAPACITY	AREA IN SQUARE FEET MINIMUM	RECOMMENDED
75.47.25	MULTI-PURPOSE ROOM*	Not Recommended		
	Play/Dining	100% Student Enrollment	5/stu	7.5/stu
	Stage		0	500
	Equipment storage		100	250
	Chair, table storage		100	250
	Kitchen and service			(see 75.48.05)
75.47.26	PHYSICAL EDUCATION			
	Gymnasium	Not Recommended in elementary schools		
	Playground			(see 75.49.08)
	Playshelter			(see 75.49.05)
75.47.27	SPECIAL EDUCATION			(see 75.47.62)
75.47.30	**MIDDLE SCHOOL**			
75.47.31	ART			
	Arts and crafts workshop Includes materials storage and clean-up area	30	1,400	1,800
	Academic instructional area	30	900	1,000
	Clothing laboratory	30	1,000	1,350
	Foods laboratory	30	1,000	1,300
	Combination laboratory	30	1,200	1,500
	Home living area			400
	Storage			150
75.47.33	INDUSTRIAL ARTS			
	General shop	30	1,600	2,000
	Mechanical drawing	30	900	1,000
	Electricity-Electronics	30	900	1,100
	Woodworking	30	1,400	1,800
	Storage			200/shop
	Locker/Dressing/Wash			200/shop
75.47.34	LANGUAGE ARTS (ENGLISH AND FOREIGN)			
	Academic instructional area	30	850	900
	Language laboratory		1,000	1,200
75.47.35	MATHEMATICS			
	Academic instructional area	30	850	900
	Mathematics laboratory	30	1,000	1,200

* **Combination Rooms as Cafeteria/Gymnasium or Cafeteria/Auditorium ARE NOT RECOMMENDED.**

	ACTIVITY	STUDENT CAPACITY	AREA IN SQUARE FEET	
			MINIMUM	RECOMMENDED
75.47.36	MEDIA CENTER - LIBRARY			
	Viewing	8	120	175
	Conference	12	150	200
	Darkroom		0	100
	Maintenance/Repair		0	150
	Office		125	200
	Periodical storage		125	175
	Reading/Browsing	*	25/stu	28/stu
	Recording	Not Recommended	0	120
	Storage (General)	***	1/stu	2/stu
	Storage (Equipment)	***	1/stu	2/stu
	Study Area	**	15/stu	20/stu
	Production Area - Teachers and Students		200	250
75.47.37	MUSIC			
	Academic instructional area	30	0	900
	Choral	60	1,200	20/stu±
	Instrumental	60	1,250	25/stu±
	Instrument storage	±	3/stu	4/stu
	Uniform/Robe storage	±	3/stu	4/stu
75.47.38	PHYSICAL EDUCATION			
75.47.38a	GYMNASIUM (MAIN)			
	Playing court	80	42'x80'	45'x84'
	Safety lanes			
	Side		5' wide	6' wide
	End		10' deep	12' deep
	Spectator seating	Not Recommended		
	Service foyer‡		200	300
	Women's toilet		75	125
	Men's toilet		75	125
	Concession booth		75	125

* Designed to accommodate 10 per cent of the total student enrollment as a minimum with accommodations for 15 per cent of the total student enrollment recommended.

** Seating for 5 per cent of the total school enrollment as a minimum with seating for 10 per cent recommended. Thirty per cent of these units should be in individual study carrels.

*** Area in square feet times number of students media center designed to accommodate.

± Based on planned maximum size of chorus and band.

‡ Used only if spectator seating is provided.

	ACTIVITY	STUDENT CAPACITY	AREA IN SQUARE FEET	
			MINIMUM	RECOMMENDED
	Multi-purpose room	40	1,200	1,500
	Gymnastics	40	1,200	1,600
	Storage (General)		150	1.5/stu
	Storage (Equipment)		150	1.5/stu
	Shower, Girls	*	2/stu	2.5/stu
	Shower, Boys	*	2/stu	2.25/stu
	Drying, Girls	*	.75/stu	1.25/stu
	Drying, Boys	*	.75/stu	1.25/stu
	Locker/Dressing, Girls	*	8/stu	10/stu
	Locker/Dressing, Boys	*	8/stu	10/stu
	Toilet, Girls	*	.75/stu	1.25/stu
	Toilet, Boys	*	.75/stu	1.25/stu
75.47.38b	SWIMMING POOL - INDOOR			
	Pool	40	16'x36'	30'x60'
	Deck Area			
	Side		6' wide	10' wide
	End		10' deep	18' deep
75.47.39	PHYSICAL SCIENCE			
	Academic instructional area	30	900	1,000
	Earth Science	30	900	1,000
	General Science	30	900	1,000
	Storage		75/lab	125/lab
75.47.40	SOCIAL SCIENCE			
	Academic instructional area	30	800	900
	Social Science laboratory	30	1,000	1,200
75.47.41	SPECIAL EDUCATION			(see 75.47.62)

* Space should be designed to accommodate 9 per cent of total student enrollment.

	ACTIVITY	STUDENT CAPACITY	AREA IN SQUARE FEET	
			MINIMUM	RECOMMENDED
75.47.50	JUNIOR HIGH SCHOOL			
75.47.51	ART			
	Arts and crafts workshop	30	1,200	1,500
	Materials storage		180	220
	Instruction/Laboratory	30	1,200	1,500
	Wash area		60	100
	Two dimensional studio	30	1,000	1,300
	Three dimensional studio	30	1,200	1,800
75.47.52	BUSINESS EDUCATION			
	Academic instructional area	30	850	1,000
	Typing laboratory	30	900	1,200
	Shorthand room	30	900	1,100
75.47.53	HOME ECONOMICS			
	Academic instructional area	30	900	1,000
	Clothing laboratory	24	1,100	1,400
	Foods laboratory	24	1,100	1,400
	Combination laboratory	24	1,300	1,500
	Home living area			450
	Storage			200
75.47.54	INDUSTRIAL ARTS			
	General shop	24	1,800	2,400
	Mechanical drawing	24	900	1,100
	Electricity/Electronics lab	24	900	1,100
	Metal shop	24	1,600	2,200
	Power mechanics	24	1,600	2,000
	Wood working	24	1,600	2,000
	Storage			200/shop
	Locker/Dressing/Wash			200/shop
75.47.55	LANGUAGE ARTS (ENGLISH AND FOREIGN)			
	Academic instructional area	30	800	900
	Language laboratory	30	1,000	1,200
75.47.56	MATHEMATICS			
	Academic instructional area	30	800	900
	Mathematics laboratory	30	1,100	1,250

	ACTIVITY	STUDENT CAPACITY	AREA IN SQUARE FEET	
			MINIMUM	RECOMMENDED
75.47.57	MEDIA CENTER - LIBRARY			
	Viewing	8	125	175
	Conference	12	150	200
	Darkroom		75	125
	Maintenance/Repair		100	150
	Office		125	200
	Periodical storage		125	175
	Reading/Browsing	*	25/stu	30/stu
	Recording	Not Recommended	0	125
	Study area	**	20/stu	25/stu
	Storage (General)	***	1/stu	2/stu
	Storage (Equipment)	***	1/stu	2/stu
	Production area - teachers and students		200	250
75.47.58	MUSIC			
	Academic instructional area	30	900	1,200
	Choral	60	1,200	20/stu±
	Instrumental	60	1,500	25/stu±
	Practice room(s)	4-6	0	80
	Instrument storage	±	3/stu	4/stu
	Uniform/Robe storage	±	3/stu	4/stu
	Library - Resource	±	1/stu	1.5/stu
75.47.59	PHYSICAL EDUCATION			
75.47.59a	GYMNASIUM (MAIN)			
	Playing court	80	45'x80'	50'x84'
	Safety Lanes			
	Side		5' wide	6' wide
	End		10' deep	12' deep
	Spectator Seating	‡	2.5/seat	3.25/seat

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* Designed to accommodate 10 per cent of the total student enrollment as a minimum with accommodations for 15 per cent of the total student enrollment recommended.

** Seating for 5 per cent of the total student enrollment as a minimum with seating for 10 per cent recommended. Fifty per cent of these units should be in individual study carrels.

*** Area in square feet times number of students media center designed to accommodate.

± Based on planned maximum size of chorus and band.

‡ Recommended seating capacity approximately 50 per cent of total student enrollment. Folding bleacher seating is suggested.

ACTIVITY	STUDENT CAPACITY	AREA IN SQUARE FEET MINIMUM	AREA IN SQUARE FEET RECOMMENDED
Service foyer		200	300
Women's toilet		100	150
Men's toilet		100	150
Concession booth		75	125
Trophy display		0	25
Multi-purpose room	40	1,400	1,800
Weight room	40	1,200	1,500
Gymnastics room	40	1,250	1,750
Wrestling	20	1,000	1,500
Dance	40	1,000	1,500
Laundry		0	200
Storage (General)		150	2/stu
Storage (Equipment)		150	2/stu
Shower, Girls	*	2/stu	3/stu
Shower, Boys	*	2/stu	2.5/stu
Drying, Girls	*	1/stu	1.5/stu
Drying, Boys	*	1/stu	1.5/stu
Locker/Dressing, Girls Physical Education	*	10/stu	12.5/stu
Locker/Dressing, Boys Physical Education	*	10/stu	12.5/stu
Locker/Dressing, Girls Athletics	**	12/stu	13.5/stu
Locker/Dressing, Boys Athletics	**	12.5/stu	15/stu
Toilet, Girls	*	1/stu	1.5/stu
Toilet, Boys	*	1/stu	2/stu

75.47.59b SWIMMING POOL - INDOOR

ACTIVITY	STUDENT CAPACITY	AREA IN SQUARE FEET MINIMUM	AREA IN SQUARE FEET RECOMMENDED
Pool	40	30'x60'	45'x75'
Deck Area			
Side		6' wide	10' wide
End		10' deep	18' deep

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* Space should be designed to accommodate 9 per cent of total student enrollment for a six (6) period school day and 10½ per cent of total student enrollment for a five (5) period school day.

** Space should be designed to accommodate number participating in largest (numerically) sport.

		STUDENT	AREA IN SQUARE FEET	
	ACTIVITY	CAPACITY	MINIMUM	RECOMMENDED
75.47.60	PHYSICAL SCIENCE EDUCATION			
	Academic instructional area	30	850	1,000
	Biology	30	900	1,250
	Earth science	30	900	1,000
	General science	30	900	1,000
	Storage		75/lab	150/lab
75.47.61	SOCIAL SCIENCE EDUCATION			
	Academic instruction area	30	800	900
	Social science laboratory	30	1,100	1,300
75.47.62	SPECIAL EDUCATION			(see 75.47.84)
75.47.63	INSTRUCTION - VOCATIONAL*			
75.47.64	GENERAL INSTRUCTIONAL AREA	30	1,000	1,250
75.47.65	DISTRIBUTIVE EDUCATION			
	Laboratory	20	1,000	1,250
75.47.66	DIVERSIFIED OCCUPATIONS			
	Laboratory	20	1,000	1,250
75.47.67	VOCATIONAL AGRICULTURE			
	Agricultural Sales/Service	24	1,000	1,400
	Greenhouse			(see 75.49.06)
	Laboratory	24	1,600	2,000
75.47.68	TOILET/LOCKER/SHOWER			200/shop

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* If additional vocational areas are used, refer to 74.46.00

	ACTIVITY	STUDENT CAPACITY	AREA IN SQUARE FEET MINIMUM	RECOMMENDED
75.47.70	SENIOR HIGH SCHOOL			
75.47.71	ART			
	Arts and crafts workshop	24	1,200	1,500
	Materials storage		180	220
	Instruction/Laboratory	30	1,200	1,500
	Wash area		60	100
	Two dimensional studio	24	1,000	1,300
	Three dimensional studio	24	1,200	1,800
75.47.72	BUSINESS EDUCATION			
	Academic instruction area	30	900	1,200
	Office machines	24	850	1,100
	Office procedures	6	300	400
	Typing laboratory	30	900	1,200
	Shorthand room	30	900	1,200
	Comptometer room	24	750	900
	Storage		0	200
	Keypunch	24	800	1,000
75.47.73	DRIVER EDUCATION			
	Academic instruction area	30	800	900
	Laboratory simulator	12	1,000	1,200
	Driving range			(see 75.49.04)
75.47.74	HOME ECONOMICS			
75.47.74a	CONSUMER and/or VOCATIONAL			
	Academic instructional area	24	900	1,000
	Clothing laboratory	24	1,100	1,400
	Foods laboratory	24	1,100	1,400
	Combination laboratory	24	1,300	1,600
	Home living area			600
	Storage			200
75.47.74b	VOCATIONAL			
	Child development	18	1,500	2,400
	Clothing and textiles	24	1,100	1,400
	Commercial food preparation	12	1,250	1,750
	Commercial sewing	18	1,250	1,600
75.47.75	INDUSTRIAL ARTS			
	General shop	24	1,800	2,400
	Mechanical drawing	24	1,000	1,200
	Electronics laboratory	24	1,000	1,250
	Metal shop	24	1,600	2,200
	Power mechanics	24	1,600	2,000
	Wood working	24	1,600	2,000
	Finishing room		180	240
	Project storage		100	150
	Storage			200/shop
	Locker/Dressing/Wash			200/shop

	ACTIVITY	STUDENT CAPACITY	AREA IN SQUARE FEET	
			MINIMUM	RECOMMENDED
75.47.76	JROTC			
	General academic instruction	40	1,000	1,200
	Arms room		150	250
	Storage		200	300
	Regulation Rifle/Pistol Range			(see 75.47.81c)
75.47.77	LANGUAGE ARTS (ENGLISH and FOREIGN)			
	Academic instructional area	30	800	900
	Language laboratory	30	1,200	1,500
75.47.78	MATHEMATICS			
	Academic instructional area	30	900	1,100
	Mathematics laboratory	30	1,100	1,250
75.47.79	MEDIA CENTER - LIBRARY			
	Viewing	8	150	200
	Conference	12	150	200
	Darkroom		75	125
	Maintenance/Repair		200	300
	Office		125	200
	Periodical Storage		125	175
	Reading/Browsing	*	28/stu	35/stu
	Recording		0	160
	Study Area	**	20/stu	25/stu
	Storage (General)	***	1.5/stu	3/stu
	Storage (Equipment)	***	1.5/stu	2.5/stu
	Production Area - Teachers and Students		200	250
75.47.80	MUSIC			
	Academic instructional area	30	900	1,200
	Choral	60	1,200	20/stu±
	Instrumental	60	1,500	25/stu±
	Practice room(s)	4-6		80 (Each)
	Instrument storage	±	3/stu	4/stu
	Uniform/Robe storage	±	3/stu	4/stu
	Library - Resource	±	1/stu	1.5/stu

* Designed to accommodate 10 per cent of the total student enrollment as a minimum with accomodations for 15 per cent of the total student enrollment recommended.

** Seating for 5 per cent of the total student enrollment as a minimum with seating for 10 per cent recommended. Fifty per cent of these units should be in individual study carrels.

*** Area in square feet times number of students media center designed to accommodate.

± Based on planned maximum size of chorus and band.

	ACTIVITY	STUDENT CAPACITY	AREA IN SQUARE FEET	
			MINIMUM	RECOMMENDED
75.47.81	PHYSICAL EDUCATION			
75.47.81a	GYMNASIUM (MAIN)			
	Playing court	80	50'x84'	50'x94'
	Safety Lanes			
	Side		5' wide	6' wide
	End		10' deep	12' deep
	Spectator Seating	***	2.75/seat	3.5/seat
	Service Foyer		300	500
	Women's toilet		150	300
	Men's toilet		125	200
	Concession booth		100	150
	Trophy display		0	25
	Multi-purpose room, Girls	40	1,400	1,800
	Multi-purpose room, Boys	40	1,400	1,800
	Weight room	40	1,200	1,500
	Gymnastics room	40	1,250	1,750
	Wrestling	20	1,000	1,500
	Dance	40	1,000	1,500
	Laundry		0	200
	Storage (General)		150	2/stu
	Storage (Equipment)		150	2/stu
	Storage (External)			(see 75.49.02)
	Shower, Girls	*	2/stu	3/stu
	Shower, Boys	*	2/stu	2.5/stu
	Drying, Girls	*	1/stu	1.5/stu
	Drying, Boys	*	1/stu	1.5/stu
	Locker/Dressing, Girls Physical Education	*	10/stu	12.5/stu
	Locker/Dressing, Boys Physical Education	*	10/stu	12.5/stu
	Locker/Dressing, Girls Athletics	**	12/stu	13.5/stu
	Locker/Dressing, Boys Athletics	**	12.5/stu	15/stu
	Toilet, Girls	*	1/stu	1.5/stu
	Toilet, Boys	*	1/stu	2/stu

* Space should be designed to accommodate 9 per cent of total student enrollment for a six (6) period school day or 10½ per cent of total student enrollment for a five (5) period school day.

** Space should be designed to accommodate number participating in largest (numerically) sport.

*** Recommended seating capacity approximately 50 per cent of total student enrollment. Folding bleacher seating is suggested.

	ACTIVITY	STUDENT CAPACITY	AREA IN SQUARE FEET	
			MINIMUM	RECOMMENDED
75.47.81b	SWIMMING POOL - INDOOR			
	Pool	40	45'x75'	60'x75'
	Deck			
	End		10' deep	18' deep
	Side		6' wide	10' wide
75.47.81c	INDOOR RIFLE/PISTOL RANGE	Each Station	5'x65'	6'x70'
75.47.82	PHYSICAL SCIENCE			
	Academic instructional area	30	850	1,000
	Biology laboratory	30	900	1,250
	Chemistry laboratory	30	1,000	1,300
	Earth science	30	900	1,000
	General science	30	900	1,000
	Physics laboratory	30	1,000	1,250
	Zoology laboratory	30	1,000	1,200
	Storage		75/lab	150/lab
	Preparation room		75/lab	150/lab
75.47.83	SOCIAL SCIENCE			
	Academic instructional area	30	900	1,000
	Social science laboratory	30	1,100	1,300
75.47.84	SPECIAL EDUCATION			
	Educable Mentally Retarded	15	1,000	1,350
	Trainable Mentally Retarded	12	900	1,200
	Physically Handicapped	12	1,600	2,000
	Speech and Hearing	6	200	300
	Behavioral Disorders	10	1,000	1,350
	Learning Disabled	15	900	1,200
	Visually Handicapped	15	1,100	1,500
	Deaf and Hard of Hearing	8	450	600
75.47.85	INSTRUCTION - VOCATIONAL			
75.47.86	GENERAL INSTRUCTIONAL AREA	30	1,000	1,250
75.47.87	AIR CONDITIONING AND REFRIGERATION	24	1,600	2,400
75.47.88	AUTOMOTIVE REPAIR			
	Mechanic shop	24	1,500	2,000
	Body repair shop	24	1,400	1,800
75.47.89	BUILDING CONSTRUCTION	24	1,800	2,400
75.47.90	COSMETOLOGY LABORATORY	24	1,250	1,600
75.47.91	DISTRIBUTIVE EDUCATION	20	1,000	1,250
75.47.92	DIVERSIFIED OCCUPATIONS	20	1,000	1,250
75.47.93	DRAFTING LABORATORY	30	1,500	2,000
75.47.94	ELECTRICITY LABORATORY	24	1,200	1,500
75.47.95	ELECTRONICS LABORATORY	24	1,100	1,600

	ACTIVITY	STUDENT CAPACITY	AREA IN SQUARE FEET	
			MINIMUM	RECOMMENDED
75.47.96	HEALTH OCCUPATIONS			
	Dental Assistant	12	1,200	1,450
	Medical Assistant	12	1,200	1,450
	Nurse's Aide	16	1,400	1,800
	Practical Nurse	16	1,400	1,800
75.47.97	MASONRY SKILLS	24	1,800	2,400
75.47.98	MATERIALS TESTING LAB	24	1,800	2,400
75.47.99	METAL SHOP			
	Fabrication laboratory	24	1,600	2,000
	Machine shop	24	1,200	2,400
75.47.100	PRINTING			
	Laboratory	24	1,200	1,600
	Darkroom			200
75.47.101	RADIO AND TELEVISION REPAIR	24	1,200	1,800
75.47.102	VOCATIONAL AGRICULTURE			
	Agricultural Sales/Service	24	1,000	1,400
	Landscape Horticulture	24	1,600	2,400
	Greenhouse			(see 75.49.06)
	Laboratory	24	1,600	2,000
75.47.103	WELDING	24	1,600	2,400
75.47.104	WOODWORKING			
	Shop	24	1,800	2,400
75.47.105	CONFERENCE/LIBRARY			250/2 shops
75.547.106	TOILET/LOCKER/SHOWER			200/shop
75.47.107	TOOL ROOM		100/shop	150/shop
75.47.108	MATERIALS STORAGE		125/shop	200/shop

	ACTIVITY	STUDENT CAPACITY	AREA IN SQUARE FEET MINIMUM	RECOMMENDED
75.48.00	SERVICE AREAS			
75.48.01	ADMINISTRATION			
	Principals Office		125	175
	Assistant Principal's Office	(each)	125	150
	Secretary and Waiting Area		150	200
	Clerks Office		100	125
	Storage		60	160
	Workroom		125	200
	Conference		0	250
	Communications Control		0	40
	Vault			75
75.48.02	AUDITORIUM			
	General Seating	*	2/stu	2.5/stu
	Stage		600	1,500
	Storage		250	400
	Dressing		225	400
75.48.03	CLINIC (FIRST AID)			
	Examining Room		0	100
	Cot Area	2	80	100
	Nurse Station		0	75
	Toilet (40 sq. ft. each sex)		80	80
75.48.04	CUSTODIAL			
	Office/Storage		0	100
	Materials - Equipment Storage		.3/stu	.5/stu
	External storage			(see 75.49.02)
75.48.05	FOOD SERVICE			
	Dining	**	3.75/stu	4.5/stu
	Dishwashing		.25	.3
	Dry Storage		.3	.3
	Kitchen		1.0	1.1
	Nonfood store		.1	.1
	Refrigeration		.25	.28
	Serving		.3	.35
	Sink and Clean		.5	.6
	Restroom		50/ea.	60/ea.
	Office		100	125
75.48.06	GUIDANCE			
	Counselors Office (Each)		100	125
	Reception/Resource		180	250
	Secretarial		125	200
	Testing Area		100	150

* Designed to accommodate one-third of total student enrollment.

** Based on 100 per cent student enrollment - 3 lunch periods. Use as a minimum enrollment 200 students.

	ACTIVITY	STUDENT CAPACITY	AREA IN SQUARE FEET MINIMUM	RECOMMENDED
75.48.07	INSTRUCTORS OFFICES	*	70	80
75.48.08	REST ROOMS			
	Boys	**	1.25/stu	1.5/stu
	Girls	**	1.25/stu	1.5/stu
75.48.09	STUDENT BOOKSTORE			
	General Sales Area		100	±1.5
	Storage		50	75
75.48.10	LOUNGE AREAS			
	Faculty Lounge	***		
	Toilet (1 each sex/each lounge)		45	65
	Kitchenette		0	120
	Lounge		25/inst	30/inst
	Student Lounge			
	Snack machines		0	.1/stu
	Lounge	±	0	1/stu
75.48.11	MECHANICAL ROOMS, TRAFFIC WAYS, AND WALLS	Should not utilize more than 20 per cent of the gross area of the building.		

* Instructors office areas should be designed generally to house all instructors in a given department. If a department has over ten (10) instructors, two (2) office areas should be provided. Office areas should be near the departmental instructional area.

** Based on 50 per cent of total student enrollment.

*** Based on 15 per cent of instructional staff - may require more than one.

± Based on 100 per cent of total student enrollment.

	ACTIVITY	STUDENT CAPACITY	AREA IN SQUARE FEET	
			MINIMUM	RECOMMENDED
75.49.00	EXTERNAL AREAS			
75.49.01	WALKS, DRIVES, PARKING			
	Walkways		4′ wide	6′ wide
	Covered Bus Loading		6′x35′	8′x40′
75.49.02	EXTERNAL STORAGE			
	Grounds Maintenance Equipment		75	125
	Physical Education Equipment		100	150
75.49.03	HAZARD MATERIALS			
	Volatile storage		100 maximum	
	Thermo-Nuclear storage		1 acre secured	
75.49.04	SPECIAL RANGES			
	Driving			300′x400′
	Rifle/Pistol (Recommend indoor only)			(see 75.47.81c)
	Archery			300′x150′
75.49.05	PLAYSHELTER*			
	K - Preschool	10% stu.body	10/ea	12.5/ea
	Elementary	10% stu.body	12/ea	15/ea
	Middle	10% stu.body	12/ea	15/ea
75.49.06	GREENHOUSE		20′x40′	
75.49.07	SWIMMING POOL (OUTDOOR)			
	Elementary - Middle			
	Pool			30′x60′
	Deck			
	End		10′ deep	12′ deep
	Side		8′ wide	10′ wide
	Junior - Senior			
	Pool			60′x75′
	Deck			
	End		12′ deep	15′ deep
	Side		8′ wide	10′ wide

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* An open structure having only a roof and a finished playing surface of asphalt, concrete, synthetics, or similar materials.

	ACTIVITY	Elementary	Middle	Junior and Senior	Area
75.49.08	**PLAYING FIELD AREAS**				
	Archery		150x150	150x300	45,000
	Badminton			20x44	1,800
	Baseball	210x210	300x300	400x400	160,000
	Basketball	40x60	50x84	50x94	4,700
	Boccie			15x75	1,950
	Bowling, Lawn			14x110	1,800
	Croquet	38x60	38x60	38x60	2,200
	Dodgeball	20′ circle	30′ circle		1,200
	Football			160x360	80,000
	Football, 6 man			120x300	54,000
	Football, Touch		120x300	160x300	80,000
	Handball, Single-wall	18x26	18x26	20x40	1,200
	Handball, Four-wall			23x46	1,058
	Hockey, Field			180x300	64,000
	Hockey, Ice			85x200	17,000
	Hopscotch	10x20	10x30		300
	Horseshoes		10x40	10x50	1,000
	Roque			30x60	2,400
	Shuffleboard			6x52	640
	Skiprope	10x20	10x20		200
	Soccer, Men			165x300	65,000
	Soccer, Women			120x240	40,000
	Softball	150x150	200x200	275x275	75,000
	Tennis		36x78	36x78	6,500
	Tennis, Deck			18x40	1,250
	Tennis, Paddle			20x44	1,800
	Tetherball	10′ circle	12′ circle	12′ circle	400
	Volleyball	25x50	25x50	30x60	2,800

75.49.09 TABLE OF WORKING HEIGHTS

	ELEMENTARY						SECONDARY					
	1	2	3	4	5	6	7	8	9	10	11	12
Chalk Rails	28″		30″		32″		34″-36″			36″-38″		
Drinking Fountains (Floor to nozzles)	24″			28″			32″			35″		
Guardrails (minimum requirement)	3½′											
Handrails (nosing to rail) Stairways, fire escapes	26″			28″			30″					
Lavatories	22″			25″			28″			30″		
Water Closets (floor to rim)	10″			13″			13″					
Work Counters	25″		27″		29″		31″-32″			33″-36″		
Urinals (floor to rim)	20″						22″					

75.50.00

Chapter V
Environmental Factors

75.51.00 FACILITY ORIENTATION ON SITE

75.51.01 The plan of orienting facilities on a site deals in its essence with three fundamental patterns; the pattern of activity, the pattern of physical environment and the pattern of form or aesthetics. These patterns or dominant themes prevail throughout the entire site planning and design of an educational facility. The planner is exposed to an endless array of interlocking possibilities for site and facility orientation. The real difficulty is treating as an interdependent whole, a set of decisions that seem too numerous to grasp.

75.51.02 The planner deals in patterns as a separate, a part, and finally as a whole, working each pattern into an integral part of the total functional facility desired. Finally the activity, the environment and the form materialize to become graphic and verbal concepts transferable to other persons.

75.51.03 The activity to be housed is a part of the educational specificiations. It makes a great deal of difference if we discuss activities ranging from preschool through academic teaching stations to vocation, technical, industrial training centers. The housing for these activities will be different and will require special considerations for site orientation. A vocational school may be located adjacent to industry but it would be undesirable to consider such a site for an elementary school. We can understand that site characteristics and the activity of that environment will have a bearing on the form of structure to be erected on that site.

75.51.04 The physical relationship of spaces and structures on a site is an important aspect of the total site development. This factor is often ignored because sites are too small and provide little latitude for the planner. It is difficult to design a culturally enriching facility in a high rise building.

75.51.05 Cost factors are often crucial to an educational facility building program. There is a point in quality that must not be surrendered to quantity. The following factors of consideration are offered in the interest of economy in facility planning.

75.51.06 A. Multistory is usually a more economical type of structure. It is not a large amount to be saved, but could represent a savings if the site lends itself to multistory.

B. Compact plans tend to be most economical.

C. Costs of construction are greatly reduced when perimeter walls are minimized. This is optimized in the round school.

D. The most efficient and economical arrangement of open space should keep the ratio of gross to net square footage lowest.

E. The actual placement of the building on the site can be a cost factor in both construction and operation. Construction costs can spiral upward if a building is located on a steep grade, a low area, old drain areas and other places on the site that require costly preparation or special techniques and machinery in the construction.

75.51.07 Loss or absence of tall trees and vegetation around a building is a significant factor in heating and cooling costs. Natural barriers restrict wind which tends to be a temperature modifier on a building.

75.51.08 Location of a building in orientation to the sun path and natural features can represent savings in construction and operation. An exposure to the south, if coupled with excessive fenestration, receives more direct sun radiation and saves on heating but costs in cooling. The material of the exposed surface of the building can be a factor in achieving desired results of reflection or absorption.

75.51.09 A building oriented to prevailing winds and with open court yards and corridors has, in effect, a natural temperature and humidifier conditioner.

75.51.10 Trees and terrain act to diminish noise pollution and should be utilized to minimize such undesirable features.

75.52.00 DEVELOPING AN ENVIRONMENT

75.52.01 An eternal persistence of mankind has been to control his environment. Controlled fires in homes to provide warmth, lamps to extend workdays and now comfort controls to fully condition internal atmospheric conditions, were and are goals to be desired. Mankind has developed conditions through technology and engineering skills providing means to control building environment. Mankind has created an envelope adequately providing shelter, comfort, safety and health for himself.

75.52.02 Mankind's zeal to achieve an engineered environment has often neglected important aspects of space and beauty. To discuss adequately a total environment, consideration must be given to these four factors:

1. Thermal
2. Visual

3. Sonic
4. Spatial and Aesthetic

75.52.03 Environmental conditions under which students and faculty seem to function most effectively are fairly well defined. These environmental factors are all of those factors external to the body that affect the actions and reactions of those exposed to them. In other words, the thermal, visual, and sonic conditions under which individuals must function are included. The following summary discussion of internal environmental conditions is not intended to be exhaustive. It is primarily a short summation of generally accepted standards and conditions desirable in educational facilities.

75.53.00 THERMAL CONDITIONS

75.53.01 Various studies have located limits of temperature where most individuals seem to be comfortable and consequently more efficient. **In general, teaching spaces should have a temperature of approximately 72 degrees F. with a range from about 68 degrees F. to 75 degrees F. With these temperature limits, the relative humidity should be in the vicinity of 50 per cent; range 40 per cent to 60 per cent.** Air movement should be regulated so that there are no drafts but still sufficient movement for uniform distribution of heated/cooled air. Twenty feet per minute in open areas appears to meet this requirement.

75.53.03 **Rest room facilities through the plant should be heated/cooled to 60 degrees F. - 63 degrees F. There are two basic reasons for this apparently low temperature: (1) to reduce student time in those areas, (2) to inhibit odor and disease producing bacteria. Air flow in these areas should be given 20-30 air changes per hour.**

75.54.00 VISUAL CONDITIONS

75.54.01 Visual conditions range from light levels to brightness ratios to color on walls, floors and furniture. **Brightness ratios should not exceed 3 - 1 in any area. Light levels in general teaching spaces should be from 75 - 100 foot candles at desk level.** All teachers should have the capability of reducing (by banks of rows) or cutting off entirely, light within their teaching space. These criteria generally require an artificial rather than a natural light source.

75.54.02 Color on walls, floors, and furniture produce a variety of psychological reactions in both students and teachers. Color on surfaces of school plants serves three basic functions:

1. To attain the level of light reflectance required to encourage rapid, accurate, and comfortable visual perception.
2. To control contrast ratio of surfaces constantly viewed by the student so as to reduce visual fatigue to the lowest possible level.

3. To create a psychological atmosphere in which the student is receptive to and encouraged in the task at hand.

75.54.03 Teaching spaces with a good visual environment will have design elements interestingly composed. There will be contrast in color, but principal area and work surfaces are planned to avoid an "eye-jarring" contrast in brightness. Ceilings, walls, and floors enter the visual field. Visual discomfort may occur if there is a significant difference in brightness. While it is necessary to control extreme brightness contrast in teaching spaces to maintain visual comfort, color variations should be employed to provide psychological relief.

75.55.00 AUDIO CONDITIONS

75.55.01 While it is not desirable to have absolute silence, it is most desirable to communicate with ease. The ear is second only to the eye as a channel through which learning takes place. To hear well, the sound level should be uniform throughout the teaching space. Carpeting is one of the basic components of noise control in educational facilities.

75.55.02 Carpet absorbs noise from student movement, furniture movement, and dropped books and other objects. With carpeted spaces, portable dividers may be used to partition spaces with as high degree of acoustical (and visual) control as is necessary to meet the criteria for hearing. There are additional benefits inherent in the use of carpet in educational facilities. Two principal ones are those psychological and physiological advantages which tend to reduce fatigue and improve attitudes of those using the spaces.

75.57.00 PHYSICAL SHAPE

75.57.01 Students and teachers in self-contained classrooms no longer have the kinds and types of spaces needed for education. A variety of sizes and shapes is needed. Spaces that can be altered both in size and shape instantly offer many advantages for an ever-changing curriculum and equally rapidly changing methods of instruction.

75.57.02 Flexibility in spaces for instruction is a key factor in providing for individual instruction. Large group lectures, small discussion groups, and individual study areas must all be included if there is to be a maximum level of efficiency reached.

75.60.00

Chapter VI
Construction

75.61.00 SPECIFICATIONS, MATERIALS

75.61.01 Legal obligations of a contractor are well documented in the contract. There is no substitute for integrity and pride in the job. This goes beyond the limits of the contract and probably will be a major factor in the successful completion of the facility.

75.61.02 Copies of complete plans and specifications covering all phases of the proposed educational facility must be submitted to the State Superintendent of Education for approval before any construction begins. These final plans and specifications must be complete in every detail. These plans and specifications representing combined efforts of the planning forces are essential to a successful building and educational program. Detailed planning should have some effect in reducing operating and maintenance costs. Completeness of detail is a responsibility of the architect but requires support and encouragement of the entire planning group.

75.61.03 **Documents that should be submitted include, but are not limited to the following: plot plan, showing boundaries, size, and shape of site, with adjoining streets, walks and drives; position of the buildings on site; location and connections of all service lines; finished contours with finished grades at building and elevation of first floor; location of wells, if any, and sewage disposal system; general landscaping; and location of walks, drives, parking and exterior steps.**

75.61.04 Floor plans, showing each floor and roof at not less than one-eighth of an inch to the foot, footings and foundations, dimensions and reinforcing schedule showing type and size of each door and window; complete figures so that room sizes and wall thickness and partitions can be readily determined; level of finished floors; furred walls and ceilings; door swings; location of built-in equipment; floor construction; run, dimensions, and spacing of joists and girders.

75.61.05 Elevations, at the same scale as architectural plans.

75.61.06 Sections, to larger scale, showing typical exterior wall sections, footings, foundations, floors, windows, cornice, roof and other detail, showing all vertical dimensions; each type and size of doors with glazing and paneling, if any, frame and trim; complete details for each type of window, together with distances to floor and ceiling; stair details showing risers, treads, handrails, newels and landing lanes; chalkboard and tackboard trim, chalk troughs, and heights; built-in equipment, counters, cupboards, and drawers; and wardrobes, unless of standard manufacture.

75.61.07 Plumbing plans, at same scale as architectural plans, showing foundation drain lines, storm and sanitary sewer lines, and complete water supply system; locations of all plumbing fixtures, including hose cabinets, if any; and sewage disposal system, if any.

75.61.08 Electrical plans, at same scale as architectural plans, using standard symbols to show all connections, inside and outside; location of wall, floor and ceiling outlets or receptacles; location and size of all conduits; capacity of outlets; location and detail of switch panels, circuit breakers and fusing; location and connections of all bells, alarms, clocks and radio outlets; types and designs of lighting fixtures.

75.61.09 Structural plans, showing all concrete and steel columns, beams, trusses, girders, joists, slabs and reinforcing; fireproofing of structural members; and details, diagrams, and schedules as required for a complete understanding of plans.

75.61.10 Complete specifications, to augment the information shown on the plans, giving details on construction materials and methods, mechanical equipment and installations and testing. In general, window shades and blinds, toilet room accessories, lockers, and all other permanent equipment forming an integral part of the building should be specified. It will often prove an economy for these items to be purchased by the local board of education and not made a part of the general contract.

75.61.11 Before the construction crews can begin their tasks, plans are essential that call for specific materials to be used. Construction specifications are materials requirements specifying a particular material of specific quality to be used in the facility. A school, whether it is a six-room elementary or multistory complex, is intended to be used as a learning environment. Care must be given to each facility to ensure that materials used are of a quality and in quantity to do the task intended.

75.61.12 Construction details and materials selected for the task must not only be functional, but they must also provide a good learning atmosphere. The specification writer must research and evaluate materials and methods of application, and translate concept into reality. This is done by writing construction specifications that communicate intent clearly and concisely.

75.61.13 The task of writing specifications has become a highly complex and technical service. Technology in equipment and construction materials demands knowledgeable persons with sound judgment to author construction specifications. The specifier may be the architect doing the drawings or some professional specifier working in harmony with the educational planner and the architect. Professional fees paid to the specifier should be the responsibility of the project architect or the local board, depending upon the area of service by the specifier. The drawings and specifications constitute data to begin construction.

75.62.00 THE BID

75.62.01 Arrangements for the bid should be coordinated with the planning team. The architect is usually considered the resource person for bid procedures. Legal counsel is advisable. The bid primarily involves the Board, architect and those placing the bid.

75.62.02 The bid procedures usually involve:

A. Plans and specifications
B. Advertising and invitation
C. Pre-bid conference
D. Review of bids
E. Award of bid
F. Contract
G. Bonding, including Power of Attorney for Performance Bond, and Labor and Materials Bond.

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STATE OF ALABAMA
DEPARTMENT OF EDUCATION
DIVISION OF ADMINISTRATION AND FINANCE
MONTGOMERY, ALABAMA

75.63.00

AGREEMENT BETWEEN OWNER AND ARCHITECT

Revised 10-1-70

THIS AGREEMENT made the ______________ day of ______________________ in the year Nineteen Hundred and ____________ by and between

____

Hereinafter called the Owner and ____

____, hereinafter called the Architect.

WITNESSETH, that whereas, the Owner intends to erect ______________________

____

____

Hereinafter called the Work, for which ______________________________________

____ Dollars ($ ________________)
has been budgeted as the (fixed) (tentative) Cost of the Work covered by this Agreement. (See Article 6).

NOW, THEREFORE, the Owner and the Architect, for the considerations hereinafter named, agree as follows:

ARTICLE 1. Basic Services. The Architect agrees to perform, for the abovementioned Work, the basic professional services A, and B, and C, and D, and E, as hereinafter defined: (Delete any not included).

A. Consultation, preliminary research, analysis, and preparation and furnishing of schematic drawings.

B. Preparation and furnishing of preliminary plans, outline specifications and estimates of cost.

C. Preparation and furnishing of working drawings and specifications necessary for Contract purposes including sufficient proposal, contract, and bond forms for prosecuting the Work, but not to exceed 25 sets without reimbursement for cost of the reproduction; also, the procuring and analysis of bids when requested by the Owner. If additional sets of the contract documents are required, the Owner will pay the cost thereof, except those where cost of reproduction was paid by the recipient, upon submittal by the Architect of a certified tabulation showing the number of sets reproduced and the disposition of same.

D. Preparation of contract documents, preparation of details and explanatory drawings, providing instructions necessary for the proper execution of the Work, and checking and approval of manufacturer's data and shop drawings.

E. General administration of the construction contract, issuing of certificates of payment, and preparation of construction records. See Article 8 for definition.

When construction work is accomplished on any other than a lump sum contract basis and Services E are included in this Agreement, the payment therefore shall be subject to a fee adjustment as agreed to and stipulated under Article 15, or by subsequent written amendment to this Agreement.

The Architect shall furnish the Owner an estimate of the Cost of the Work based upon the approved preliminary drawings and outline specifications. The required approval of this estimate and preliminary drawings and outline specifications by the Owner and all public agencies involved will constitute authority for the Architect to proceed with the completion of final plans and specifications.

If, after the approval of the preliminary drawings and prior to the completion of the final plans and specifications, unforeseen conditions should arise which would substantially affect the Cost of the Work, or should the Owner require substantial changes from the approved preliminary drawings and specifications, the Architect may submit in writing to the Owner an accordingly revised estimate which, upon approval, shall supersede the approved preliminary estimate and shall become the agreed budget amount.

The Architect does not guarantee the accuracy of his estimates except that in the event the total of lowest bid or bids received by the Owner for the Work exceeds the budget amount as set forth above, or as established by the approval of estimates, by more than ten per cent (10%), or exceeds the amount legally authorized or alloted for the project, the Architect agrees that, without extra cost to the Owner, he will make such revisions and changes to the plans and specifications as may be necessary to reduce the Cost of the Work to an amount not in excess of the funds available and agreeable to the Owner for the Cost of the Work, and will perform the incidental work and furnish the number of necessary documents as required by the basic Agreement.

ARTICLE 2. Basic Fees. The Owner agrees to pay the Architect for the basic services in this Agreement the following percentages of the basic rate of the Fee Schedule except as may be hereinafter modified:

For A.	Ten per cent of the basic rate.
For B.	Fifteen per cent of the basic rate.
For C.	Fifty per cent of the basic rate.
For D.	Five per cent of the basic rate.
For E.	Twenty per cent of the basic rate.

The Schedule of Basic Fee Rates is divided into five (5) basic building type groupings as listed herewith, each grouping carrying the Basic Fee Schedule as tabulated hereinafter.

BUILDING TYPE GROUPINGS:

Group I. Parking structures and Repetitive Garages, Simple Loft Type Structures, Warehouses (exclusive of automated equipment), other similar utilitarian type buildings, Farm Structures, Industrial Buildings without special facilities.

Group II. Armories, Apartments, Bakeries, Bowling Alleys, Cold Storage Facilities, Dormitories, Exhibition Halls, Freight Facilities, Hangars, Manufacturing/Industrial Plants, Motels, Office Buildings*, Packaging and Processing Plants, Printing Plants, Public Markets, Skating Rinks, Service Garages.

*Without tenant improvements.

Group III. Cinema, College Classroom Facilities, Convention Facilities, Correctional and Detention Facilities, Dining Halls (institutional), Fire Stations, Gymnasiums*, Hotels, Laundries and Cleaning Facilities, Marinas, Nursing Homes, Office Buildings (with tenant improvements), Parks, Playground and Recreational Facilities, Police Stations, Post Offices, Publishing Plants, Restaurants, Schools (Elementary and Secondary), Specialty Shops, Stadiums, Transportation Terminals, Welfare Buildings, Neighborhood Centers and Similar Recreational Facilities, Banks, Exchanges and other financial institutions, Extended Care Facilities, Hospitals, Laboratories, Libraries, Medical Schools, Medical Office Facilities and Clinics, Mental Institutions, Mortuaries, Public Health Centers, Religious Facilities, Research Facilities, Veterinary Hospitals.

Also Central Utilities Plants, Water Supply and Distribution Plants, Sewage Treatment and Underground System, Electrical Sub-station and Primary and Secondary Distribution Systems, Roads, Bridges, and Major Site Improvements when any or all are considered incidental to an overall plan of architectural development.**

*Simple, prefabricated-preengineered, minimum types shall be classified under Group II.

**Will be grouped with Basic Architectural Service unless otherwise agreed in Article 15.

Group IV. Aquariums, Auditoriums, Airport Control Towers, Art Galleries, Breweries, College Buildings and with special facilities, Communications Buildings, Exposition Buildings, Observatories, School (Special), Theaters and similar facilities.

Group V. Mausoleums, Memorials, Monuments, Museums, Residences*, Specialized decorative buildings, Custom Designed Furnishings.

*Unless otherwise agreed in Article 15.

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SCHEDULE OF BASIC FEE RATE BY BUILDING TYPE GROUPINGS:

COST OF WORK			GROUP AND FEE IN PERCENTAGE				
			I	II	III	IV	V
	Up to	$300,000	5.0	6.0	7.0	8.0	9.0
300,001	to	400,000	4.9	5.9	6.9	7.9	8.9
400,001	to	500,000	4.8	5.8	6.8	7.8	8.8
500,001	to	600,000	4.7	5.7	6.7	7.7	8.7
600,001	to	700,000	4.6	5.6	6.6	7.6	8.6
700,001	to	800,000	4.5	5.5	6.5	7.5	8.5
800,001	to	900,000	4.4	5.4	6.4	7.4	8.4
900,001	to	1,000,000	4.3	5.3	6.3	7.3	8.3
1,000,001	to	1,250,000	4.2	5.2	6.2	7.2	8.2
1,250,001	to	1,500,000	4.1	5.1	6.1	7.1	8.1
1,500,001	to	1,750,000	4.0	5.0	6.0	7.0	8.0
1,750,001	to	2,000,000	3.9	4.9	5.9	6.9	7.9
2,000,001	to	2,500,000	3.8	4.8	5.8	6.8	7.8
2,500,001	to	3,000,000	3.7	4.7	5.7	6.7	7.7
3,000,001	to	3,500,000	3.6	4.6	5.6	6.6	7.6
3,500,001	to	4,000,000	3.5	4.5	5.5	6.5	7.5
4,000,001	to	5,000,000	3.4	4.4	5.4	6.4	7.4
5,000,001	to	6,000,000	3.3	4.3	5.3	6.3	7.3
6,000,001	to	8,000,000	3.2	4.2	5.2	6.2	7.2
8,000,001	to	10,000,000	3.1	4.1	5.1	6.1	7.1
10,000,001	and Over		3.0	4.0	5.0	6.0	7.0

In changing from one cost bracket to the next higher bracket due to change orders, etc., the total fee shall remain at the maximum paid for the lower bracket until that amount and the new bracket fee are equalized, then they new bracket fee becomes effective.

For major renovation and alteration work the Basic Fee shall be increased by 25% in the proper Group Category. Method of Actual Application of the increase shall be as defined in Article 15, otherwise the increase will not be allowable.

The applicable basic rate shall apply to the combined cost of all buildings or other work covered by this Agreement whether in one or more construction contracts, including separate contracts for any phase of the work.

The work covered by this Agreement is hereby assigned to Group ___________. If the work is so divided that more than one Group is involved, see Article 15 where the buildings or work in each Group are named, Group number given, and tentative budget for each Group is given. If this Agreement is for work not listed in any Grouping, See Article 15 for explanation.

In the case of substantial duplication of buildings covered under the scope of this Agreement, the Basic Fee for Services A, B, C, D and E shall be applicable to the Cost of the Work for the first building. One half of the Basic Fee for Services A, B and C shall be applicable to the Cost of the Work for the second building which is a substantial duplication of the first. The fee for Services A, B, and C for other buildings which are substantial duplications of the first and second buildings shall be negotiated and defined in Article 15, but in no case shall exceed the fee for the first duplication. The fees for Services D and E shall be paid in full for duplicated buildings.

It is further agreed that under a subsequent Owner-Architect Agreement, the basic fee for any substantial duplication of buildings covered by this Agreement will be paid in accordance with the terms detailed above, except that any change in the fee schedule in effect at the date of the subsequent Agreement will be applicable.

Any special or unusual conditions not covered hereinbefore shall be as detailed in Article 15 - Special Provisions.

ARTICLE 3. Extra Services and Special Cases. If the Architect is caused extra design, drafting supervision, or other major expenses due to major changes in completed work ordered by the Owner in work performed in accordance with the Owner's instructions, or due to the delinquency or insolvency of the contractor, or as a result of damage by fire or storm , he shall be equitably paid for such expense and the services involved, provided that an amendment to this Agreement is executed for the extra work prior to the performance of same by the Architect. The amount to be paid for such extra work shall be based upon the Architect's records of his actual cost plus one hundred per cent (100%) allowance for overhead and profit. Actual cost to the Architect shall include (1) actual salaries of all employees involved, (2) proration of supervisory time, (3) consultant's fees, (4) laboratory fees if authorized by Owner, (5) travel, and (6) miscellaneous items such as telephone toll calls and extra printing. Allowance for overhead and profit shall include such items as normal office expense (rent, utilities, janitorial service, use of equipment, insurance) and the cost of mandatory and customary benefits such as holidays, vacations, pensions, insurance, FICA, etc.

ARTICLE 4. Termination of Agreement. This Agreement shall terminate without notice should the project be abandoned, or be postponed or delayed, for more than _________ months from the date of the Agreement. It may be terminated by the Owner at the expiration of ten (10) days after written notice to the Architect for any failure of the Architect to comply with the provisions of this Agreement.

If the Owner determines that the project is to be abandoned, postponed or delayed he shall notify the Architect in writing and the Architect shall immediately stop all work on the project. Payments to the Architect for work completed shall be in accordance with provisions of Article 5.

ARTICLE 5. Payments. From time to time during the execution of his work and in proportion to the amount of service rendered by the Architect on account of Services A, B, C, D or E in this Agreement, payments shall be made until the aggregate of all payments made are equal to the percentages on the basic rate or rates arising from this Agreement computed on the Cost of the Work as hereinafter defined and/or modified.

Payments on account of Services A, B, and C shall be due and payable as noted below upon completion of those phases and approval of same by the Owner. Payments on account of Services D and E shall be due and payable as noted below as the work progresses and shall be based upon an amount not to exceed the amount of work completed as approved on the periodic estimates of the Contractor or Contractors.

Upon satisfactory completion of construction work and its final acceptance by the Owner the Architect shall be paid any unpaid balance of fee due hereunder. Prior to such final payment under this contract or prior to settlement upon termination of the contract, and as a condition precedent thereto the Architect shall deliver to the Owner all required guarantees, record drawings or any other conditions named or implied in the Agreement.

Payments upon (1) the termination of the Agreement (2) final payments upon the completion of services prior to the determination of the final Cost of the Work, and (3) partial payments shall be computed from the agreed budget or the agreed estimate of the Cost of the Work whichever is the lesser.

If the Owner abandons, delays, or postpones the project as defined in Article 4 the Architect shall deliver to the Owner copies of all documents either completed or in progress so that a determination of the status of the Service (s) involved may be determined to be used on a percentage of completion basis for payments to the Architect.

Other final payments shall be adjusted and computed from the final Cost of the Work as hereinafter defined and/or modified.

Any payments due for services under the provisions of Article 3 of this Agreement will be paid from time to time as the services are performed or the necessary expenses are incurred, and such payments shall be considered separate and distinct from payments made under the provisions of Articles 1 and 2.

ARTICLE 6. Definition of the Cost of the Work. For determination of the Architect's basic fees, the Cost of the Work means the cost to the Owner, but such cost shall not include any Architect's or Engineer's fees or reimbursements, or the cost of a Clerk-of-Works, or the cost of fixtures or equipment except built-in or attached equipment included in plans and specifications at the Owner's request, and shall not include construction costs, expenses or fees covered by Articles No. 3 and No. 15. The Cost of the Work shall not include the cost of movable equipment or furnishings unless requested in writing by the Owner and is defined in Article 15 or by amendment to the Agreement.

No deduction shall be made from the fee for architectural services on account of liquidated damages or other sums withheld from payments to contractors.

When labor or material is furnished by the Owner below its market cost, the Cost of the Work shall be computed upon such market cost in determining the agreed estimate of the Cost of the Work.

ARTICLE 7. Survey, Borings, and Tests. The Owner shall, insofar as the Work under this Agreement may be required, furnish the Architect with the following information: A complete and accurate survey of the building site, giving the grades and lines of streets, pavements, and adjoining properties; the rights, restrictions, easements, boundaries, and contours of the building site; and full information as to sewer, water, gas and electrical services. The Owner shall pay for borings or test pits and for chemical, mechanical or other tests when required for the preparation of plans and specifications.

ARTICLE 8. Administration of the Construction Contract. The Architect will endeavor to require the Contractor to strictly adhere to the plans and specifications, to guard the Owner against defects and deficiencies in the work of Contractors, and shall promptly notify the Owner in writing of any significant departure in the quality of materials or workmanship from the requirements of the plans and specifications, but he does not guarantee the performance of the contracts.

The Architect, as the representative of the Owner during the Construction Phase, shall advise and consult with the Owner and all of the Owner's instructions to the Contractor shall be issued through the Architect. The Architect shall have authority to act on behalf of the Owner to the extent provided in the General Conditions unless otherwise modified in writing.

The Architect shall at all times have access to the Work wherever it is in preparation or progress.

The Architect shall make periodic visits to the site and as hereinafter defined to familiarize himself generally with the progress and quality of the Work and to determine in general if the Work is proceeding in accordance with the Contract Documents. On the basis of his on-site observations as an architect, he shall endeavor to guard the Owner against defects and deficiencies in the Work of the Contractor. The Architect shall not be required to make continuous on-site inspections to check the quality or quantity of the Work. The Architect shall not be responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, unless spelled out in the Contract Documents, and he shall not be liable for results of the Contractor's failure to carry out the work in accordance with the Contract Documents.

Based on such observations at the site and on the Contractor's Applications for Payment, the Architect shall determine the amount owing to the Contractor and shall issue Certificates for Payment in such amounts. The issuance of a Certificate for Payment shall constitute a representation by the Architect to the Owner, based on the Architect's observations at the site as provided in the preceding paragraph and on the data comprising the Application for Payment, that the Work has progressed to the point indicated, that to the best of the Architect's knowledge, information and belief, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is entitled to payment in the amount certified. By issuing a Certificate for Payment the Architect shall not be deemed to represent that he has made any examination to ascertain how and for what purpose the Contractor has used the monies paid on account of the Contract Sum.

The Architect shall have authority to reject Work which does not conform to the Contract Documents. The Architect shall also have authority to require the Contractor to stop the Work whenever in his reasonable opinion it may be necessary for the proper performance of the Contract. The Architect shall not be liable to the Owner for the consequences of any decision made by him in good faith either to exercise or not to exercise his authority to stop the Work.

The Architect shall review and approve shop drawings, samples, and other submissions of the Contractor only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents.

The Architect shall not be responsible for the acts or omissions of the Contractor, or any Subcontractors, or any of the Contractor's or Subcontractor's agents or employees, or any other persons performing any of the Work.

Administration of the Contract by the Architect shall include inspections by the Electrical and Mechanical Engineers who prepared the plans and specifications for the work. A final inspection and an inspection at the end of the one-year guarantee period are required for all projects. In addition, inspection by Engineers must include: a minimum of one (1) inspection during construction where the cost of the work is $50,000.00 or less; a minimum of two (2) inspections during construction where the cost of the work is between $50,000.00 and $500,000.00 and a minimum of three (3) inspections during construction when the cost of the work is in excess of $500,000.00 For complex projects, additional inspections will be required as determined by the State Superintendent of Education.

The administration of the contract by the Architect is not normally to be construed as meaning the furnishing of continuous inspection which may be obtained by the employment of a Clerk-of-Works. However, the administration shall be consistent with the size and nature of the work and must include, at least, one(1) inspection each week. A final inspection and an inspection at the end of the one-year guarantee period shall be required on all projects. If included under Article 15, or if later authorized by the Owner by written amendment to this Agreement, a Clerk-of-Works acceptable to the Owner and Architect shall be engaged by the Architect at a salary satisfactory to the Owner and paid for by the Owner upon presentation of the Architect's monthly statements.

The Architect shall promptly furnish the Owner and each of the public agencies involved a copy of the written report of each inspection by him or his representative or engineers in a form approved by the State Building Commission and the agencies involved.

ARTICLE 9. Engineering Services. The Architect agrees that all plans, specifications, detail drawings, approvals, etc., for engineering services pertaining to the design of structural, mechanical, electrical and other specialized phases of engineering will be done by Professional Engineers registered in the State of Alabama and employed by the Architect for the particular work,, except where such engineering services are of such minor nature as to be considered purely incidental to the architectural services required for the project. When such engineering services can be justifiably classified as purely incidental, then these services may be performed by men regularly employed in the Architect's organization who are not registered Professional Engineers, but are particularly qualified by education, experience and training to do this type of work. Any question as to whether or not these services are purely incidental to the project will be resolved by decision of the State Superintendent of Education.

All plans prepared by Engineering Consultants shall be separately identified by title, sheet number, and official registration seal or signature and registration number. Engineering drawings shall not be combined with other drawings unless deemed to be in the "incidental" category.

Designated herewith (as applicable) are the Engineering Consultants or Associates:

Structural Engr. & Reg. No.	Elec. Engr. & Reg. No.	Plumbing Engr. & Reg. No.
Address	Address	Address
Heating, Ventilating & A/C Engr. & Reg. No.	Civil Engr. & Reg. No.	
Address	Address	Address

No changes will be made in Consultants designated without prior written consent of the Owner.

ARTICLE 10. Approval of Plans and Specifications. Schematic, preliminary and final drawings and specifications for all projects under the jurisdiction of the State Board of Education shall be submitted to the State Superintendent of Education for review and approval. Schematic, preliminary and final drawings and specifications for all projects, the planning and construction of which is within the jurisdiction of the State Building Commission, shall be submitted to its Director of Technical Staff for approval in strict conformity with its established policies and procedures.

ARTICLE 11. Record Documents. When services E are included in this Agreement, the Architect shall furnish the Owner two complete record sets of plans of the project as finally constructed, with all corrections, revisions, and changes clearly shown thereon; and two sets of specifications to which shall be attached copies of all contract change orders and modifications. The record documents shall be delivered to the Owner and/or the State Department of Education as directed immediately after final inspection and before final Architect's inspecting fee is paid.

ARTICLE 12. Ownership of Documents. Drawings and specifications as instruments of service are the property of the Architect, whether the Work for which they are made be executed or not.

Should the work as herein agreed be terminated on the completion of Services A, B, and C the Architect shall deliver, unless requested by the Owner to postpone delivery until so requested, up to 25 sets of plans and specifications. The Owner shall be entitled to use these plans and specifications, with or without modification, for the construction of all or part of one entire project as planned and specified without further payment to the Architect.

ARTICLE 13. Successors and Assignments. The Owner and the Architect each binds himself, his partners, successors, executors, administrators, and assigns to the other party to this Agreement, and to the partners, successors, executors, administrators, and assigns of such other party in respect of all covenants of this Agreement.

ARTICLE 14. Completion Schedule. The Architect agrees to furnish complete schematic drawings for review by the Owner and/or other public agencies within __________ calendar days after the Owner has furnished him a complete list of the requirements and site survey necessary for their development. The Architect further agrees to furnish complete preliminary plans, outline specifications and cost estimate for review by the Owner and other public agencies within __________ calendar days after receipt of necessary approvals of the schematic drawings; and to furnish complete final working drawings, specifications and contract document forms for review by the Owner and/or other public agencies within ____________ calendar days after receipt of necessary approvals of preliminary documents.

ARTICLE 15. Special Provisions.

THE OWNER AND THE ARCHITECT hereby agree to the full performance of the covenants contained herein.

APPROVED:

STATE BOARD OF EDUCATION

By__________________________________
State Superintendent of Education

CONTRACTING PARTIES

____
Architect

By __________________________________
Member of Firm

____
Owner

By __________________________________
Officer-Title

____

____

STATE OF ALABAMA
DEPARTMENT OF EDUCATION
DIVISION OF ADMINISTRATION AND FINANCE
MONTGOMERY, ALABAMA

SDE-2

85

75.64.00

FORM OF CONTRACT

AGREEMENT BETWEEN CONTRACTOR AND OWNER

THIS AGREEMENT made the ________________ day of ________________, in the year

Nineteen Hundred and ____________________, by and between __________________

____, of ____________________, Alabama,

hereinafter called the Contractor, and the ________________________________

(City-County) Board of Education ________________________________, Alabama,

hereinafter called the Owner.

WITNESSETH, that the Contractor and the Owner for the consideration hereinafter named agree as follows:

Article 1. Scopes of Work: The Contractor shall furnish all of the materials and perform all of the work shown on the Drawings and described in the Specifications entitled:

prepared by ____
acting as and in these Contract Documents entitled the Architect; and shall do everything required by this Agreement, the General Conditions of the Contract, the Specifications, and the Drawings.

Article 2. Time of Completion: The work to be performed under this Contract shall be commenced ____
and shall be substantially completed ____________________________
____.
The Contractor agrees that, from the compensation otherwise to be paid, the Owner may retain the sum of ______________________
____________________________________($______________________)
Dollars for each calendar day thereafter that the work remains incompleted. The date of final acceptance by the State Department of Education and the Architect will determine the date of completion.

Article 3. Bonds: Performance and Labor and Material Bonds in accordance with Section 16, Title 50, Code of Alabama 1940, will be furnished to the Owner by the Contractor within the stipulated time. Performance and Labor and Material Bonds will be executed with a surety or guaranty company licensed to write official Surety Bonds in the State of Alabama, which companies are approved by the State Insurance Department in accordance with governing statutes.

Article 4. Insurance: Workman's compensation, fire insurance, tornado insurance, and other insurance as may be required by Federal, State, and local laws on building projects will be procured by the Contractor and maintained by him for the duration of the Contract. Fire and tornado insurance coverage will be of an amount at least equal to the total sum of all payments made to the Contractor by the Owner. Insurance liability will be made payable to the Owner and Contractor as their interest may appear.

Article 5. Contract Price: The Owner agrees to pay the Contractor for performance of the Contract the sum of ______________________ ________________________________($______________)Dollars in current funds, partial payments on account of the Contract to be made as follows: On or about the 10th day of each month 90 per cent of the value, based on the Contract prices, or labor and materials incorporated in the work and of materials suitably stored at the site thereof up to the 1st day of that month, as estimated by the Architect, less the aggregate of previous payments; and upon substantial completion of the entire work, a sum sufficient to increase the total payments to 90 per cent of the Contract price, the remaining 10 per cent to be paid upon completion and final acceptance of the Work by the State Superintendent of Education or his authorized representative, in accordance with the provision of Act No. 254, approved June 24, 1943.

Article 6. Acceptance and Final Payment: Final payment shall be due 30 days after substantial completion of the Work, provided the Work be then fully completed and the Contract fully performed.

Within 10 days after receipt of written notice that the Work is ready for final inspection and acceptance, the Architect and the State Superintendent of Education or his agent shall make such inspection, and when the Work is found acceptable under the Contract and the Contract fully performed, the State Superintendent of Education shall issue a final certificate in writing, within 5 days, stating that the Work provided for in this Contract has been completed and is accepted by him under the terms and conditions thereof, and that the entire balance found to be due the Contractor as noted in the Architect's final certificate, is due and payable.

Before issuance of final certificate the Contractor shall submit evidence satisfactory to the Architect that all payrolls, material bills, and other indebtedness connected with the Work have been paid and that he has advertised in accordance with Section 16, Title 50, Code of Alabama, 1940.

If, after the Work has been substantially completed, full completion thereof is materially delayed through no fault of the Contractor, and the Architect so certifies, the Owner shall, upon certificate of the State Superintendent of Education, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. Such payments shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

Article 7. The Contract Documents: The Contractor and the Owner agree that the Instruction to Bidders, the General Conditions of the Contract, the Specifications and the Drawings, together with this Agreement, form the Contract, and they are as fully a part of the Contract as if hereto attached or herein repeated. The following is an enumeration of the documents, specifications, and drawings:

1. Notice to Contractors (Advertisement).
2. Architect's Instructions to Bidders.
3. General Conditions.
4. Specifications.
5. Form of Proposal.
6. Form of Contract - Agreement Between Contractor and Owner.
7. Performance Bond Form.
8. Labor and Material Bond Form.
9. ______________________________sheets of Plans.
10. ____.

The Contractor and the Owner for themselves, their successors, executors, administrators, and assigns, hereby agree to the full performance of the covenants herein contained.

IN WITNESS WHEREOF they have executed this agreement, the day and the year first written above in three (3) counterparts, each of which shall, without proof or account for the other counterparts, be deemed an original contract after approval by the State Superintendent of Education.

APPROVED:

State Board of Education

By______________________________
State Superintendent of Education

Contractor______________________________

By______________________________

Owner______________________________

By______________________________

75.65.00

PERFORMANCE BOND FORM

KNOW ALL MEN: That we ____
(Insert here the name and address or legal title

____ hereinafter
of the Contractor

called the Principal, and ____
(Insert here the name and address or legal

____
title, of one or more Sureties

____ and

____

____ and

____ and

____

reinafter called the Surety or Sureties, are held and firmly bound

unto ____
(Here insert the name and address or legal title of the Owner)

hereinafter called the Owner in the sum of ______________________________

($__________________) for the payment whereof the Principal and the

Surety or Sureties bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly, by these presents.

WHEREAS, The Principal has, by means of a written Agreement, dated ____________________

__________________________, entered into a Contract with the Owner for

____

____ which

Agreement is by reference made a part hereof:

NOW THEREFORE, the condition of this Obligation is such that if the Principal shall faithfully perform the Contract on his part, and satisfy all claims and demands, incurred for the same, and shall fully indemnify and save harmless the Owner from l cost and damage which he may suffer by reason of failure to do so, and shall fully reimburse and repay the Owner all outlay and expense which the Owner may incur in making good any such default, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

PROVIDED, however, that no suit, action or proceedings by reason of any default whatever be brought on his Bond after twelve months from the day on which the final payment under the Contract falls due.

PROVIDED further, that the said Surety or Sureties, for value received, hereby stipulate and agree that no change, extension of time, alteration or addition to the terms of the Contract or to the Work to be performed thereunder or the specifications accompanying the same shall in any wise affect their obligations on this Bond, and they do hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the specifications.

Signed and Sealed this __________day of ______________________, 19______

(Individual Principals sign here)

In the presence of:

___________________________ ___________________________(Seal)

___________________________ ___________________________(Seal)

___________________________(Seal)

___________________________(Seal)

(Corporate Principal sign here)

____

Attest:_______________________ By___________________________

(Surety sign here)

____

Attest:_______________________ ___________________________

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LABOR AND MATERIAL BOND FORM

(See Instructions on Page 2)

KNOW ALL MEN BY THESE PRESENT, That we ______________________________

____

as Principal, and ______________________________ as Surety,

are held and firmly bound unto ______________________________.

(hereinafter called the Obligee) in the penal sum of ______________________________

______________________________ ($__________________) Dollars

lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, personal representatives, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, said Principal has entered into a certain Contract with said Obligee, dated ______________________________, 19 ________, (hereinafter called the Contract) for

____

which Contract and the Specifications for said Work shall be deemed a part hereof as fully as set out herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH that if said Principal and all subcontractors to whom any portion of the work provided for in said Contract is sublet and all assignees of said Principal and of such subcontractors shall promptly make payments to all persons supplying him or them with labor, materials, feed-stuffs or supplies for or in the prosecution of the work provided for in such Contract, or in any amendment or extension of or addition to said Contract, and for the payment of reasonable attorney's fees, incurred by the claimant or claimants in suits on said Bond, then the above obligation shall be void; otherwise to remain in full force and effect. PROVIDED, however, that this Bond is subject to the following conditions and limitations:

(a) Any person, firm or corporation that has furnished labor, materials, feed-stuffs or supplies for or in the prosecution of the work provided for in said Contract shall have a direct right of action against the Principal and Surety on this Bond, which right of action shall be asserted in a proceeding, instituted in the County in which the work provided for in said Contract is to be performed or in any County in which said Principal or Surety does business. Such right of action shall be asserted in a proceeding instituted in the name of the claimant or claimants for his or their use and benefit against said Principal and Surety or either of them (but not later than one year after the final settlement of said Contract) in which action such claim or claims shall be adjudicated and judgment rendered thereon.

(b) The Principal and Surety hereby designate and appoint ________________________ ________________________________ as the agent of each of them to (Executive Officer of the Obligee) receive and accept service of Process or other pleading issued or filed in any proceeding instituted on this Bond and hereby consent that such service shall be the same as personal service on the Principal and/or Surety.

(c) The Surety shall not be liable hereunder for any damages or compensation recoverable under any workman's compensation or employer's liability statute.

(d) In no event shall the Surety be liable for a greater sum than the penalty of this Bond, or subject to any suit, action or proceeding thereon that is instituted later than one year after the final settlement of said Contract.

(e) This Bond is given pursuant to the terms of an act approved February 8, 1935, entitled: "An Act to further provide for Bonds of Contractor on State and other public works and suits thereon."

SIGNED, SEALED AND DELIVERED this ______day of ___________, 19_________

(Individual Principals sign here)

In the presence of: ____(Seal)

_______________ ____(Seal)

____(Seal)

_______________ ____(Seal)

(Corporate Principal sign here)

Attest: ____

_______________ _______________ By____

(Surety sign here)

Attest: ____

_______________ _______________ By____

Instructions

1. The full Christian name and residence of each individual party to the Bond must be inserted in the first paragraph.
2. If the Principal is a partnership, the full names of all partners must be inserted in the first paragraph which must recite that they are the partners composing the partnership (to be named), and all partners must execute the Bond as individuals.
3. The state of incorporation of each corporate party to the Bond must be inserted in the first paragraph and the Bond must be executed under the corporate seal of said party attested by its secretary or other appropriate officer.
4. The date of the Bond must not be prior to the date of the Contract.

75.67.00 INSPECTION

75.67.01 Probably no other single factor is more cost saving and more important to long-range operation and maintenance of a facility than inspection. It is imperative that a thorough program of inspection be conducted by the architect. It is well to suggest that the school board adopt and publicize the policy that only the project architect should make suggestions, corrections or requests to the contractor. This should be understood by all persons affiliated with the project. Unauthorized work requests can be expensive and have legal involvements. Utilize only one line of communication to the contractor.

75.67.02 Inspection is essential to comply with the schedule of payment. The board should be cognizant of building progress on the periodic schedule. This information is made available by the project architect.

75.67.03 The purpose of an inspection is to assist in achieving the objectives of the project. These can usually be expressed in three expectations: (1) expect the specified value; (2) expect an effective utilization; and (3) expect to occupy the facility within the time specified.

75.68.00 FINAL INSPECTION

75.68.01 The final inspection or end of construction check should be conducted by the project architect, contractor, local superintendent of education, a representative from the local board of education, and a representative from the School Architect's Office. Official notations should be made on the project architect's register concerning all deviations from plans and/or corrections to be made to comply with contracted plans.

75.68.02 The following list contains items that should be evaluated during the final inspection. This is to assure compliance with final plans and specification. "As constructed plans" should be used for this inspection. It is well to remember that periodic inspections have been conducted to ensure quality of materials and craftsmanship in those areas not visible at final inspection. The final inspection should be an examination for location, proper types, quantity, installation, finish, mounted heights, proper operation and cleanliness.

75.68.03 **Site and Development**

Drives
Fencing
Finish Grading
Landscaping
Location on Plot
Parking Areas
Playground
Walks

Building Exterior

- Drains
- Flashings
- Foundation
- Glass and Glazing
- Railings
- Roofing
- School Name
- Trim
- Walls
- Windows and Doors

Building Interior

- Acoustical
- Ceilings
- Chalkboards
- Doors and Frames
- Floors
- Tackboards
- Toilets
- Walls
- Windows

Utilities

- Cleanouts
- Clock System
- Drainage System
- Fire Alarm System
- Fixtures, Plumbing
- Heating and Cooling Equipment
- Heating and Cooling Controls
- Panels
- Shutoffs
- Switches and Plates
- Telephone System

Equipment and Furnishings

- Display Cases
- Extinguishers
- Fountains
- Lockers
- Storage
- Refrigeration

75.68.04 A suggested schedule for finalizing the project is suggested below. The provisions for closing the project should be clearly indicated in the specifications of the contract.

75.68.05 Contractor notifies the project architect 10 days prior to desired inspection date. This is a written notice indicating any exceptions that should be noted to the project architect.

75.68.06 The project architect notifies all concerned agencies of the proposed inspection date and time the inspection briefing will begin. Coordinate the date with the State Superintendent of Education or his authorized representative, the School Architect, before confirming to others.

75.68.07 Inspectors may be divided into teams to fully examine all aspects of the building. A full briefing may be made for all inspection teams prior to beginning inspection.

75.68.08 Conduct a thorough evaluation of the building. The project architect should record all conditions of workmanship or material that constitutes a deviation from the final plans or specifications. This recording is to be an accurate record capable of being introduced into court if arbitration becomes necessary.

75.68.09 All notations that require remedial action should be submitted to the project architect, in writing and certified receipt.

75.68.10 Within a time agreed upon by the project architect and contractor, all discrepancies should be cleared. When these minor details of craftsmanship or material defect are cleared, the project architect may certify the contract to be fully executed.

75.68.11 Final payment is authorized by the State Superintendent of Education when the building has been fully completed and the contract has been fully performed.

75.68.12 The project architect should receive written notice from the contractor that all payrolls, services and materials have been paid in full. The contractor must advertise in accordance with Section 16, Title 50, **Code of Alabama** 1940.

75.68.13 When the above conditions are met the owner should make final payment in full to the contractor.

75.68.14 In summary, the steps in the Building Program would be:

A. School survey and development of overall, long-range plan.

B. Educational planning to determine the specific program to be accommodated.

C. Court approval if applicable.

D. Selection of an architect.

E. Architectural contract approval.

F. The cooperative development of schematic and preliminary plans by the project architect, State Department of Education personnel, local superintendent, local board of education, educational planner, teachers, pupils, custodians, community groups and others.

G. Approval of schematic and preliminary plans by the State Superintendent of Education, or his authorized representative, the School Architect.

H. Development of working drawings and specifications.

I. Approval of final plans and specifications by the State Superintendent of Education, or his authorized representative, the School Architect.

J. Advertise for bids.

K. Award the Contractor-Owner Agreement.

L. Obtain construction contract approval.

M. Request periodic and final inspection by the State School Architect.

N. Final acceptance of the building by the State Superintendent of Education, or his authorized representative, the School Architect.

O. Turning over two sets of "As-Built" documents to the Owner in accordance with Article II of the Architect-Owner Agreement. The local superintendent shall keep these plans and specifications on file in his office at all times.

75.70.00

Chapter VII
Furniture and Equipment

75.71.00 ASSESSMENT

75.71.01 Furniture and equipment are those items associated with the instructional function of the school but not a functional part of the building, are useable by all school personnel, and are moveable at will with relative ease. Furniture should be flexible and adaptable to serve instructional needs and the individual differences of students and teachers. Administrators, teachers and furniture manufacturers are keenly aware that comfortable, colorful and functional furniture greatly contributes to the learning environment.

75.71.02 There is a growing emphasis on independent study and research which means students utilize a greater portion of the instructional aids and equipment of the learning center. When functional equipment is made a tool in the hands of learners, it stimulates creative effort and helps provide an environment where imaginative minds grow and learning becomes exciting.

75.71.03 Current tendency in purchasing furnishings is to select those designed to do a specific job. Specific criteria should be observed in selection of furnishings and it should be subjected to an overall master criterion: the most functional and practical furniture serves the school's purpose and consequently enhances learning. Purchase of furniture and equipment is a long-term investment and must be given the utmost consideration. The current needs must be satisfied, but because of durability, future considerations must be a part of the furnishings plan.

75.71.04 Furniture should:

A. Encourage good posture
B. Utilize reflective colors
C. Be resistant to tampering efforts
D. Have rounded surfaces
E. Be flexible
F. Have features for noise reduction
G. Be attrative
H. Require minimum maintenance
I. Not mar, dent or scratch the flooring.

75.71.05 Furnishings required may be a part of educational specifications. A separate document should be developed to designate furnishings specifications and specific equipment required. The purchasing agent may take this document and develop a purchase order with complete specifications to invite concessionaires to bid.

75.71.06 The person purchasing furnishings should be familiar with some form of guide to evaluate the products. The following ten features should be considered a part of the evaluation:

(1) Safety. Educational objectives are second only to safety to student and personnel. Liability judgments are costly in both finances and community relations. Each type of furnishings should be tested for safety of the user. Don't accept the sales brochure on this point alone. Test it. Use it. Check it for smooth edges and moveable parts that can pinch tiny fingers. Does it tear clothing? It is stable to sit on or in? Will it fall easily or will it cause hurt or damage in use?

(2) Educational suitability. Does the equipment or furniture do the job you want done? It has been a practice in some instances to buy a chair that will fit most fourth graders but must be used by first through sixth graders as well. Research indicates learning is enhanced when learners are comfortable. Chairs, tables, and desks must fit the learner. A good test is to sit in a prospective chair for an hour. Since color is a factor in the learner's environment, colors should be available that will complement the decor of the teaching space.

(3) Durability. Investment of furnishings represents a substantial portion of the costs of the new facility and some consideration must be given to durability. It is to be understood that material will wear and fail, but this factor must be a part of the overall evaluation.

(4) Space consolidation. Furniture and equipment are often stored when not in use. Products that can be stored in a minimum of space have a decided advantage over those requiring costly floor spaces in an excessive amount.

(5) Costs. Cost of a product should be measured as initial cost, plus handling costs, plus maintenance cost, plus replacement cost. It has been computed that costs for handling and arranging furniture from storage to use and back ranges from one to three cents per item per time. These costs could exceed the original investment if considerable time is utilized in handling chairs and equipment.

(6) Building codes. Assurances must be made that all units purchases adhere to applicable building codes of local, state and national specifications.

(7) Guarantee. Only units which carry at least one year of guarantee against defects in workmanship and materials should be considered.

(8) Availability. Delivery date can be a crucial part of the time frame for ordering equipment.

(9) Replacement. Consider the needs of replacing worn or damaged furnishings with like equipment.

(10) Flexibility. Mobility is an important feature in selecting most furnishings.

It is well to remember that quality should not be compromised for multipurpose furnishings.

75.72.00 SPECIFICATIONS

75.72.01 Furniture and equipment purchases should be organized into an efficient and conservative operation for the overall educational objectives of the facility. This operation is best conducted when all factors are known and specifics for a piece of furniture can be documented. The purpose of specifications is to describe in detail quality and quantity of furniture and equipment. It is advisable to include preferred terms under which construction, assembly and installation should occur.

75.72.02 Specifications should be written simply and precisely without ambiguity. Be specific, no vagueness. This document will be the basis of bid and it must be specific enough to convey the same directive to each bidder. The body of the document should be devoted to a schedule of furnishings and concisely describe each, but a notation should be made concerning general and specific conditions such as insurance, bond, delivery, installations, guarantees, and other relative details.

75.72.03 For convenience, furnishings should be divided into two major groupings: furniture and equipment, moveable and fixed. Further divisions can then be made for each instructional space and learning facility. It is not unusual to entertain unit price and a total bid for particular groupings. This promotes a more active competition among bidders for a total contract and permits the school to award separate contracts to low bidders for each type of equipment if this is more advantageous. Usually the single contractor price is most advantageous.

75.72.04 Specifications should be specific in quality and special features but not so specific or rigid in minor detail as to eliminate material of a slightly different construction. Avoid the term "or equal" in describing items. This is sometimes misunderstood to mean similar which does not meet specifications. There is no objection to mentioning brand names, especially for common items. It is objectional to use the specifications of a brand name item without using the name. Subsequent bidding is a farce and prices are usually higher.

75.72.05 There is no easy way to prepare detailed and accurate specifications. It requires a joint effort of those interested in the project, architect, educational planner, and local personnel. Common sense and good judgment are factors used in efficient plans and specifications.

75.73.00 THE BID

75.73.01 There are many procedures used in bid techniques. Past procedures favored including all furniture in one contract to the builder. Another technique was to secure a separate contract with a furniture and equipment supplier. Another procedure has been to let the purchasing agent handle all furniture and equipment. The disadvantages to these procedures have been poor architectural design, higher price and discrimination against specialized furnishings to do specific tasks in the learner environment.

75.73.02 A current method that appears to be a favorable procedure is accepting separate bids for group items. If this is done through the architect, the facility will more assuredly conform to the educational specification decor and criteria established by joint effort.

75.73.03 If the furnishings are listed for separate invitation, the following procedure is recommended:

A. Advertise directly to as many suppliers as may participate in the bid.
B. Specifications should be supplied to each prospective bidder.
C. Bid openings should be specified in the advertisement as to date and time.
D. Bid evaluation is a critical part of the bid procedure. Legal implications warrant a careful analysis and evaluation of each bid. If there is any doubt, request the suppliers to demonstrate the items in question.

75.74.00 THE CONTRACT

75.74.01 Contract awards should be made to the supplier who is lowest bidder on items meeting specifications. Evaluation must be made before the contract is awarded. Any special arrangement or commitment by the supplier should be a part of the contract.

75.74.02 The contract should reflect the provisions of supply, payment, installation and any details related to the function of that article. The success of bidding and purchasing is constant evaluation by knowledgeable persons.

75.75.00 INSTALLATION

75.75.01 The process of installation represents the final step in the complex procedures of securing the best possible learning environment for the student in the new facility. A thorough understanding and close supervision by responsible persons should be a part of the plan for installation. Three considerations in installation are delivery schedules, installation and guarantee.

75.75.02 Furniture and equipment will most likely arrive at differing times unless delivery is made to a temporary location. The supplier must provide reasonably accurate deliveries on dates as scheduled. Tradesmen may be depending on equipment to be delivered within a close time frame.

75.75.03 Notations of damaged goods is a routine matter but accepting substitutes or defective material is a condition that must not be tolerated. In the acceptance of goods, carefully ascertain that items are as contracted. Carefully inspect the installation of all equipment. Cabinets must be secure, drawers as specified, and in general the equipment should be secured if attached and in a good mechancial condition. Usually 10 per cent of the contract price is withheld until all discrepancies in goods and installation are corrected.

75.75.04 Guarantees are a part of every furnishings contract. All warranties and guarantees of suppliers should be filed. Establish a method of evaluation of furniture and equipment as an ongoing project of the school. Be reasonable about damages to furniture. Do not hold the supplier accountable for the wilful abuse of furniture. Establish an inventory and control register for all furniture and equipment. It is suggested that an identifying label should note purchase price of articles. This aids record keeping, discourages defacing actions and promotes pride in furnishings.

75.75.05 It is advisable that the supplier should offer training to system personnel for care and maintenance of the furniture and equipment. This should be a part of the contracted services by the supplier. The life of the furnishings is related to the use and care it receives by users and maintenance personnel.

75.80.00 Chapter VIII
Occupying New Facilities

75.81.00 OCCUPYING THE NEW FACILITY

75.81.01 Occupying a new educational facility should be occasion for students, staff and faculty to sense accomplishment. The years of planning and construction have brought reality to the new facility. The important thing is that it is not just a new building, it is the culmination of the most modern learning concepts, the latest technology in learning resources, and the best technology in design, construction and material. Essentially the new facility represents the educational hopes of the community and reflects their ability to pay for it.

75.81.02 It should be an unthinkable process to move in furniture, faculty and students without an intensified program of public information and instruction in the use of the facility for the intended users. Methods of accomplishing this program are varied and a list would be exhaustive. A few suggestions for consideration are offered in the following discussions.

75.81.03 Arrangements may be made with the local newspaper to devote an insert to the new facility. This could be in a form that persons could keep as a floor plan guide, as an aid in selecting schedules and as memorabilia of community effort. This is a popular method of promoting good educational public relations.

75.81.04 A brochure may be prepared with pictures, diagrams and explanations of the new facility. These may be mailed to the constituency of the district. Such brochures are often maintained as an aid in conducting visitor tours to the facility.

75.81.05 A comprehensive brochure of the facility complex is an effective way to "show off" the achievement. Such a brochure embraces the educational concepts to be promoted, the design features of the architect, the technology of materials, costs, a succinct explanation of of educational programs offered and credits to principal participants in the facility development. This is usually an elaborate and very effective publicity brochure.

75.81.06 The school principal will want the most effective educational program for the new facility. This will mean that staff and faculty must know equipment and facility. A good procedure is to conduct an in-service program in the summer to develop the team efforts of how to best utilize the facility and care for it. Time spent in this endeavor is a most worthwhile effort and will have favorable consequences. The senior custodian is often employed during the late stages of construction, and is schooled in equipment care and preventive maintenance.

75.81.07 Students are sometimes used to conduct the guided tours of the facility, particularly for open house or dedication or whenever large public attendance is anticipated. This encourages a particular segment of students to be especially familiar with the overall operation and function of the facility. This use of students promotes a healthy public relation condition. The success of this technique is directly related to the knowledge and enthusiasm the students possess and display.

75.81.08 A conference may be conducted with principal planners and users of the new facility. Such a conference would inform faculty and staff of the care and use of equipment and review educational specifications to prepare for implementing the educational program.

75.81.09 This is not a complete listing of instructions about the facility. It is well to remember that many opportunities for public relationships are present when occupying a new publicly funded facility. The astute administrator uses these opportunities to maximum advantage. The primary concern of preparing to occupy the facility is that of instituting and implementing the educational program specified in the educational specifications.

75.82.00 EVALUATING THE NEW FACILITY

75.82.01 Evaluating the new facility is an essential part of the total planning effort. This effort is to assess the teaching and learning adequacy the new school provides. This helps to ensure continued excellence in the system. Careful analysis of the results of a periodic and systematic evaluation makes it possible to retain desirable features that facilitate learning and correct or modify existing undesirable aspects.

75.82.02 In order that an evaluation of an educational facility may be standardized, it is necessary to adhere to certain basic assumptions and guidelines which include, but are not limited to the following requirements:

A. Any effective evaluation plan must lead to continued self-evaluation by those interested in promoting a better learning environment.

B. An evaluation should consider the educational objectives of a particular culture and measure the educational practice against these community needs.

C. The evaluation should be constructed to provide information on desired areas of consideration.

D. An evaluation should provide a feedback on the relationship of policy and techniques in the educational program.

E. Evaluation should always promote and facilitate planning.

75.82.03 The planner should develop a type of checklist that may be used to evaluate on a continuing basis. Determine the areas to evaluate and develop the instrument. Select the persons to conduct and develop the evaluation and analyze the results. Caution is suggested in prematurely releasing publicity and adverse evaluation of a facility that has not been thoroughly evaluated.

75.83.00 MAINTAINING THE NEW FACILITY

75.83.01 There is probably no other area of indirect support more crucial to the learning environment than that of maintenance and operations personnel. We take for granted the function of these personnel. We expect the lights to be on, the temperature comfortable and the building and grounds to be neat. The people that work tirelessly behind the scenes to keep the facility functional are those maintenance and operations crews.

75.83.02 Early detection of material fatigue, corrosion and erosion results in countless savings. Suspicious flaws in wiring and heating detected by maintenance and operations personnel can possibly save a building from destruction.

75.83.03 Maintenance and operations personnel must be diligent to duty, completely trustworthy, knowledgeable about many aspects of technology in care and operations of a building complex. The ideal maintenance and operations person is a rare find indeed.

75.90.00

Chapter IX
Financing the Educational Facility

75.91.00 THE CAPITAL BUDGET

75.91.01 In order to establish an orderly procedure for fiscal requirements for educational facilities, capital budgeting is utilized. Such a budget reflects the total educational program and the willingness or ability of the community to pay for the programs. Because the capital budget reflects both the current or annual request and the long range educational aspirations, it must of necessity be a carefully prepared document reflecting an accurate assay of the needs and abilities of the community.

75.91.02 The annual budget is carefully prepared to reflect an accurate anticipated income and expenditure account. Adequate guides are available from the State Department of Education on the preparation, reporting and maintaining of this record. It is to the development of the long range capital budget that the following narration is directed.

75.91.03 Budgeting is always a matter of priorities, therefore the first priority is to define the capital needs of the school system. A comprehensive survey, as discussed in Chapter I, is probably a good point of departure for establishing factors for budget considerations. Such a survey might provide the basis for:

A. Accurately evaluating the existing educational program and revealing factors for anticipating future curricular needs

B. Efficiently and accurately allocating capital resources in an equitable manner to all segments of the pupil populations

C. Anticipating population trends which would grant advanced information for selecting educational sites.

75.91.04 The well developed capital budget will reflect the range and scope of the planner to perceive the educational aspirations of the system. To convert these needs to fiscal expressions of income and expenditure requires a thorough knowledge of the educational programs to be implemented.

75.91.05 It is recommended, as a word of caution, in that the budget is a public document, only project costs should be reflected. To include detailed costs in the document might be detrimental to competitive and bargain bids.

75.91.06 Consideration should be given to include in the capital budget such items as:

A. Furnishing and equipment
B. Remodeling and renovation
C. New facilities
D. Acquiring new sites
E. Curricular changes
F. Capital programs
G. Administrative facilities

75.91.07 Each project or entry should be documented with relative justification for anticipated expenditure. The budget should include a recommendation as to how the projects are to be funded.

75.91.08 A suggested format for a table of contents for the annual and long-range capital budget is as follows:

Title Page
Letter of Transmittal
Table of Contents
Educational Goals and Philosophy
Program of Recommended Capital Improvements
    (Educational Facility Needs)
    New Schools
    Additions to Schools
    Alterations and Renovations
    Furnishings and Equipment
    Land Acquisitions
    Related Facility Needs
Program of Required Expenditures
Program of Income and/or Revenue
Anticipated Five-Year Program of Capital Improvements
Appendix

75.91.09 In summary, it is important to remember that the capital budget is nothing more than a written expression of educational facility needs, followed by a translation of these needs into costs and closed with a proposition of how these needs will be funded.

75.92.00 THE BUDGET CALENDAR

75.92.01 The calendar and the process cannot be separated. The most successful budgets seem to be those that are prepared as a result of a continuous operation. Budgeting consists of preparation, adoption and implementation. The following schedule is a suggested calendar for developing the annual and five-year capital budget.

September through December: survey the school district to ascertain educational facility needs.

January and February: prepare the budget document for review by the superintendent of schools.

March and April: finalize the superintendent's budget for presentation to the board of education.

May: hearings, review, and adoption of the superintendents capital budget by the board of education.

June and July: review by State Department of Education, county and city governments as may be appropriate.

August and September: prepare for implementation of budget.

September: implement budget.

75.93.00 CONSTRUCTION COSTS

75.93.01 Provisions should be made in the budget for the following items of consideration. This is not an all inclusive list and should be modified as situations dictate.

A. The educational survey
B. Acquisition of land
C. Architectural fees and consulting costs
D. The construction contract
E. Site preparation and development
F. Furnishings and equipment
G. Supplies and other materials
H. Administrative and legal costs
I. Insurance costs
J. Contingencies

75.93.02 The suggested considerations above should receive command attention whether the proposal is for new construction, remodeling or renovating. The accuracy and reliability of such a budget reflects the diligence and thoroughness of the planner.

75.94.00 ALTERNATIVES IN FINANCING SCHOOL FACILITIES

75.94.01 Financing a school facility often involves choices of selecting a proper method to suit the needs and abilities of the system to pay. The various methods of school financing available to Alabama school systems should warrant a detailed consideration before making a final determination. Considerations and variables to selecting a financing method might include:

A. Does the program provide adequate funds for current and anticipated school construction?

B. Is all Federal and State assistance being utilized?

C. Is allowance being made for contingency operations not planned?

D. Is the school financing plan commensurate with the local government?

E. Is the tax rate stable and predictable?

F. Does the plan reflect the majority of the people?

G. Does the plan provide a financial flexibility?

75.94.02 Pay-As-You-Go

This plan of financing is a simple cash transaction for all constructions. Cash must be available to meet the schedule of expenditures. Cash can be raised through a one-time levy, a sinking fund or reserve fund, Federal or State aid or through non-tax revenue.

75.94.03 State Aid

Certain State aid is available for new construction and remodeling and renovating under certain conditions. The details and scope of the program should be secured from the Division of Administration and Finance, State Department of Education.

75.94.04 Federal Aid

The provisions of P.L. 815 (impact aid) are available to systems that have a 6% (per cent) enrollment of federally related students. Information is available from the administrators of that program, U. S. Office of Education, Division of School Assistance for Federally Affected Areas, School Construction Branch, Washington, D. C.

75.94.05 Within a city's urban renewal area, lands may be purchased and cleared by a joint (25% - 75%) contribution of city and federal funds. The federal government pays 100% of such purchase and clearing costs and the city pays its 25% only as the land is sold. The urban renewal law states that if the city uses the lands cleared for schools, then the city is exempt from its 25% payment. Essentially this means that schools could receive a cleared site "free."

75.94.06 Shared Facilities

Public agencies and taxpayers may benefit from shared facilities. Libraries are prime facilities that may be shared. Gymnasiums, auditoriums and recreational facilities are a few facilities that could be considered to be shared by the public and school on alternating times. Such a plan could mutually benefit school and public.

75.94.07 Non-tax Revenue

It is highly advisable to consult with legal counsel before engaging in public land and facility lease/sale for school revenue. This holds many interesting aspects that must be evaluated.

75.94.08 Bond Issues

The general obligation bond has been the traditional medium of long-term financing for school construction for many years. It is legal everywhere and is well regulated. The bond issue program requires a general public voter acceptance. The recent history of bond programs by voters has been unfavorable to acceptance. It is believed that a public well informed to the educational needs and goals acts favorable to bond obligation acceptance.

APPENDIX

PUBLIC SCHOOL LAWS
PERTAINING TO
EDUCATIONAL FACILITIES

Excerpts taken from
PUBLIC SCHOOL LAWS
OF THE
STATE OF ALABAMA
ANNOTATED
1970

§ 1(1). **Eliminating causes of fires and other conditions which jeopardize health and safety of school children.**—In order to eliminate the causes of school fires and other conditions which jeopardize the health and safety of school children: (1) The county or city superintendent of education shall notify the state superintendent of education within ten days after the beginning of the construction of a building and upon the request of the county or city superintendent of education, the state superintendent of education or his agent shall inspect said building during construction for the purpose of seeing that plans and specifications upon which the contract was let are being complied with. (2) A county or city superintendent of education shall not recommend, and a county or city board of education shall not approve, for payment more than 90 per cent of the contract price of the building constructed by the county or city board of education until the state superintendent of education or his agent has made a final inspection of said building for the purpose of seeing that the plans and specifications upon which the contract was let have been complied with in full. The state superintendent of education or his agent must make final inspection of a school building within ten days after being notified by the county or city board of education that the building is ready for final inspection. When the state superintendent of education or his agent makes a final inspection of a building and finds that it has been completed in accordance with said plans and specifications, the state superintendent of education must within five days after said final inspection give the county or city board of education written notice that the building has been completed in accordance with plans and specifications. If the state superintendent of education or his agent in making final inspection finds that the building has not been completed in accordance with plans and specifications, the state superintendent of education shall not authorize acceptance of said building until it has been completed in accordance with the plans and specifications on which the contract was let or until the contractor or his bondsmen make an adjustment satisfactory to the county or city board of education and the state superintendent of education. Final acceptance of a building cannot be made by a county or city board of education and the final payment of 10 per cent of the contract price of such building cannot be made until the state superintendent of education has given written notice to the county or city board of education that said building has been completed in accordance with the plans and specifications upon which the contract was let. (3) Contracts for architectural services and for school building construction shall be made by county and city boards of education on contract forms prescribed by the state superintendent of education, into which forms the contracting parties shall write the terms and conditions of the contract agreed upon. (4) Representatives of the department of finance charged with the responsibility of inspecting buildings insured in the state insurance fund shall at all times have the authority to inspect for fire hazards school buildings insured in the state insurance fund. Reports of said inspections shall be made to the county or city superintendent of education, the state superintendent of education, and the director of finance of the state department of finance. If a board of education fails within thirty days to eliminate a potential fire hazard, or hazards, in a school building insured in the state insurance fund when notified to do so by a representative of the state department of finance charged with the responsibility of inspecting buildings insured in the state insurance fund, upon the recommendation of the state superintendent of education, the director of finance shall have the authority to order the affected building vacated and closed until said potential fire hazard, or hazards, are eliminated. (1943, p. 224, appvd. June 24, 1943.)

§ 61(15). Determination to close or reopen school not subject to review.—A determination to close a public school made in accordance with the procedure hereto prescribed or to reopen the school upon termination of the cause for discontinuance shall be final and not subject to review by any court or other authority. (1957, p. 724, § 3.)

§ 71. Property vested in county board.—All the property, estate, effects, money, funds, claims, and donations now or hereafter vested by law in the public school authorities of any county for the benefit of the public schools of any county are hereby transferred and vested in the county board of education, and their successors in office. Real and personal estate granted, conveyed, devised or bequeathed for the use of any particular county, school district, or public school, shall be held in trust by the county board of education for the benefit of any such county school district or school. (1927 School Code, § 95.)

§ 99. Powers of county board.—The county board of education shall have the right to acquire, purchase by the institution of condemnation proceedings if necessary, lease, receive, hold, transmit and convey the title to real and personal property for school purposes. It may sue and contract, all contracts to be made after resolutions have been adopted by the board and spread upon its minutes. All processes shall be executed by service on the executive officer of the board. (1927 School Code, § 132; 1933, Ex. Sess., p. 81.)

§ 101. Insurance on schools.—The county board of education is charged with the duty of seeing that every school building whose title is vested in the state, county or school district is insured for its insurable value, and to this end may use a part of the proceeds of incidental fees, district tax levies, or such other funds as may be specifically set apart for such purpose by the county board of education. (1927 School Code, § 134.)

§ 113. Location of school buildings.—The county superintendent of education, subject to the provisions of this title, shall recommend for approval and adoption by the county board of education, the kind, grade and location of schools to be established and maintained, and the compulsory school attendance districts to be established. (1927 School Code, § 151.)

§ 116. Building program and school attendance; district boundaries.—The county superintendent of education shall recommend a building program adequate to the present and future needs of the schools in the county, subject to the provisions of this title. He shall recommend a plan for the laying out of such local attendance district or districts as will best serve the interests of the entire county, and shall submit the same for approval and adoption by the county board of education. (1927 School Code, § 154.)

§ 117. Condemnation and improvement of buildings and playgrounds.—The county superintendent of education shall recommend to the county board of education for condemnation school buildings which are insanitary and unfit for use. He shall recommend in writing all repairs, purchase of playgrounds, and school sites and buildings to be erected with state, county and local aid, and shall see to it that the plans and specifications, and the rules and regulations of the state board of education, with reference to the erection, repair, and equipment of the school buildings, are carefully followed. He shall approve in writing all contracts of whatever kind entered into by the county board of education. (1927 School Code, § 155.)

§ **144. School building controlled by trustees.** — The board of school trustees shall have the care of the building and grounds, the school apparatus and other school property, and shall keep the county board of education advised about matters affecting the educational interest of said school. It shall attend to all incidental repairs and pay for same out of the incidental funds collected in accordance with this chapter, provided that when repairs are to be paid for out of other than incidental funds, the amount to be expended shall be approved by the county superintendent of education and authorized by the county board of education before the repairs are made. (1927 School Code, § 184.)

§ **146. Sanitary conditions maintained by trustees.**—The board of school trustees shall see that the water closets or outhouses connected with the school are kept clean, comfortable, and in a sanitary and hygienic condition. (1927 School Code, § 186.)

§ **147. Use of schoolhouse for civic purposes.** — The board of school trustees shall have the power to authorize the use of the schoolhouse for such civic, social, recreational and community gatherings as in its opinion do not interfere with the principal use of the said school building or property. It shall be the duty of the person or persons making application for the use of the schoolhouse for a public meeting place to see that the said schoolhouse after said meeting is in as clean a condition as it was before said meeting, and in case of failure upon the part of said person or persons to whom permission has been granted to hold the meetings to place said school after said meeting in as clean a condition as it was when said schoolhouse was turned over to said person or persons for said meeting, or the failure of the person or persons to respond in damages to any injury to the property, the ordinary wear and tear excepted, the board of school trustees shall refuse all further applications for the use of such schoolhouse by the same parties. (1927 School Code, § 187.)

§ **160. School property vested in board.**—All property real and personal and mixed now held or hereafter acquired for school purposes shall be held in trust by the city board of education for the use of the public schools of the city. (1927 School Code, § 200.)

§ **161. May acquire property.**—The city board of education shall have the full and exclusive rights within the revenue appropriated for such purposes, or accruing to the use of the public schools, to purchase real estate, furniture, appropriated libraries, fuel and supplies for the use of the schools, and to sell the same, and to make expenditures for the maintenance and repairs of the school grounds, buildings and other property, to establish and build new schools, to superintend the erection thereof, to purchase sites therefor, to make additions, alterations and repairs to the building and other property erected for school uses, and to make necessary and proper notes, contracts and agreements in relation to such matters. All such contracts shall inure to the benefit of the public schools, and any suit in law or equity brought upon them and for the recovery and protection of money and property belonging to and used by the public schools, or for damages, shall be brought by and in the name of the city. (1927 School Code, § 201.)

§ **168. Acquiring property for city schools.**—When lands or any interest therein shall be by the board of education deemed necessary for the site of a schoolhouse or for enlarging a schoolhouse lot, or for playgrounds or other public school purposes, and the board of education for any reason shall be unable to contract with the owner or owners for the title thereof the said board of education may institute condemnation proceedings to acquire such lands or the interest therein. Said condemnation proceedings shall be in all respects conducted and regulated as provided by chapter 1 of Title 19. (1927 School Code, § 208; 1931, p. 192.)

§ **183. Building program for city schools.** - The city superintendent of schools, subject to the regulations from time to time of the city board of education and in accordance with the provisions of this title, shall outline a building program adequate to meet the needs of the schools in the city, and shall submit the same for approval and adoption by the city board of education. (1927 School Code, § 225.)

§ **184. School buildings and grounds.**—The city superintendent of schools shall recommend to the city board of education for condemnation school buildings which are insanitary and unfit for use. He shall recommend all repairs, purchase of playgrounds, school grounds, school sites and buildings, or the sale of the same, and shall prepare, or cause to be prepared, all plans and specifications for the remodeling of old buildings, and the construction of new buildings. He shall recommend in his discretion to the board of education an architect or architects to assist in the preparation of plans and specifications for remodeling old buildings, for the construction of new buildings, and shall supervise such remodeling and construction. He shall approve in writing all contracts of whatever kind entered into by the city board of education. (1927 School Code, § 226.)

§ **197(13). Creation of independent school district; transfer of school buildings and employees.**—In the event that a majority of those voting at a special election in the area shall vote in favor of withdrawing the area from the existing school system and organizing it as an independent school district, the area shall forthwith be constituted an independent school district under the supervision and management of a district board of education. Title to all public school buildings and property in the area shall be divested out of the present title holder whether it be the state of Alabama, a county, a municipality or the existing board of education and shall be forthwith transferred to and vested in the district board of education, which shall be entitled to the immediate possession thereof. All principals, teachers and other employees who performed services for the existing board of education exclusively in the public schools located in the independent school district shall be transferred to the district board of education, and the district board of education shall be liable upon all contracts of employment with such principals, teachers and other employees. (1959, 2nd Ex. Sess., p. 202, § 13, appvd. Aug. 10, 1959.)

§ **197(24). Powers, functions and duties of board.**—The district board of education is hereby vested with all the powers necessary or proper for the administration and management of the schools within the independent school district. The district board of education shall have, within the independent school district, all the powers, functions and duties that a city board of education has under Title 52, sections 158 to 168, inclusive, and 170 to 174, inclusive, Alabama Code of 1940, as amended. (1959, 2nd Ex. Sess., p. 205, § 24, appvd. Aug. 10, 1959.)

§ **207. Appropriation of funds out of county treasury.**—The courts of county commissioners or boards of revenue of the several counties of Alabama are authorized at any meeting of said court in any calendar year to appropriate any funds they may deem proper and expedient out of the general funds of the county treasury for the construction, repair, operation, maintenance and support of new or existing public schools within said county. (1931, p. 687; 1959, 2nd Ex. Sess., p. 196, appvd. July 31, 1959.)

§ **207(2). Distribution of funds from matriculation fees and local fees for purchase of school supplies and maintenance of school property.**—(1) The various county and city boards of education may distribute from matriculation fees or local fees to each local school under their control and supervision, each fiscal year, an amount deemed necessary by said board, not to exceed ten dollars ($10.00) per student enrolled in said school as of October 1 of said fiscal year, for purchase of local school supplies and maintenance of school property.

(2) School principals receiving funds authorized under the provisions of this section shall be required to give bond for the faithful performance of their duties in the penal sum of an amount to be set by the city or county board of education, as the case may be, provided, however, that said bond shall not be less than one thousand dollars ($1,000.00).

(3) Funds distributed to the local schools under the provisions of this section shall be expended by the school principal receiving the appropriation under such rules and regulations as shall be established by the respective city and county boards of education provided, however, that no purchase shall be made from any person, business or association in which the principal or any member of the respective board of education has a pecuniary or monetary interest and provided further, however, that no item or maintenance work purchased shall exceed two hundred and fifty dollars ($250.00) in amount, nor shall any item or group of related items or maintenance work be separated into component parts to evade this provision and provided further, however, that all items of work purchased shall be paid for when performed or delivered and no credit purchases shall be authorized.

(4) School principals receiving funds under the provisions of this section shall make an accounting to the city or county board of education, as the case may be, each thirty days under such procedures and regulations as shall be established by the respective city and county boards of education with the approval of the chief examiner of the state department of examiners of public accounts. (1963, 2nd Ex. Sess., p. 346, appvd. May 9, 1963.)

CHAPTER 27D.

PUBLIC EDUCATIONAL BUILDING AUTHORITIES.

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§ **513(36). Definitions and use of phrases.**—The following words and phrases used in this chapter, and others evidently intended as the equivalent thereof, shall, in the absence of clear implication herein otherwise, be given the following respective interpretations herein:

"Ancillary improvements" means educational and related facilities of every kind including, but without limitation to, classrooms, scientific and other laboratories, libraries, auditoriums, gymnasiums, cafeterias, dining rooms, dormitories, student and faculty apartments, student union buildings, recreational and social facilities, student and faculty infirmaries and clinics, and facilities for washing, laundering and cleaning clothing and fabrics of every kind, or any combination of any thereof, and shall also include equipment and furniture and fixtures used or useful in educational and related facilities of every kind.

"Applicant" means a natural person who files a written application with the governing body of any municipality in accordance with the provisions of section 513(38) of this title.

"Authority" means any public corporation organized pursuant to the provisions of this chapter.

"Board" means the board of directors of an authority.

"Bonds" means bonds, notes and certificates representing an obligation to pay money.

"Construction" and "construct" have reference to (1) the construction of new buildings and the expansion, remodeling, and alteration of existing buildings, and (2) the equipment and furnishing of new buildings and existing buildings, whether or not expanded, remodeled, or altered.

"County" means any county in the state.

"Determining municipality" means any municipality the governing body of which shall have made findings and determinations of fact in accordance with the provisions of section 513(38) of this title.

"Director" means a member of the board of directors of the authority.

"Educational institutions" means every college, university, graduate school, professional school, junior college, trade school, elementary school, secondary school, and every institution for education and training of the deaf, blind or mentally retarded, heretofore or hereafter established or acquired under statutory authorization of the legislature of Alabama and existing as public institutions of learning supported in substantial part by state appropriations or by revenues derived from taxation.

"Governing body" means the council, commission, or other like governing body of a municipality.

"Incorporators" means the persons forming a public corporation organized pursuant to the provisions of this chapter.

"Municipality" means an incorporated city or town of the state.

"Person" means a natural person, a public or private corporation, a municipality, a county, or an agency, department or instrumentality of the state or of a county or municipality.

"Property" means and includes real and personal property, and interests therein.

"State" means the state of Alabama.

"Herein," "hereby," "hereunder," "hereof," and other equivalent words refer to this chapter as an entirety and not solely to the particular section or portion thereof in which any such word is used.

The definitions set forth herein shall be deemed applicable whether the words defined are used in the singular or plural. Whenever used herein any pronoun or pronouns shall be deemed to include both singular and plural and to cover all genders.

Whenever in this chapter any power is given to an educational institution, or whenever reference is made to any action by an educational institution, such power shall extend to any and may be exercised by the board of trustees or other body having general supervisory power over the educational institution. (1966, Ex. Sess., p. 309, § 1, appvd. Aug. 30, 1966.)

HEW guidelines were carefully formulated and are restatement of judicial standards. — It is evident to anyone that the HEW guidelines were carefully formulated by educational authorities anxious to be faithful to the objectives of the 1964 Civil Rights Act. The HEW standards are strikingly similar to the standards the supreme court and the fifth circuit court of appeals have established. The guidelines, therefore, are not run-of-the-mine agency pronouncements low in the hierarchy of administrative declarations. They are not regulations requiring the approval of the president. They may be described as a restatement of the judicial standards applicable to disestablishing de jure segregation in the public schools. United States v. Jefferson County Bd. of Educ., 372 F.2d 836 (5th Cir. 1966).

And should be given great weight. — Courts in the fifth circuit should give "great weight" to HEW guidelines. Such deference is consistent with the exercise of traditional judicial powers and functions. HEW guidelines are based on decisions of this and other courts, are formulated to stay within the scope of the Civil Rights Act of 1964, are prepared in detail by experts in education and school administration, and are intended by congress and the executive to be part of a coordinated national program. The guidelines present the best system available for uniform application, and the best aid to the courts in evaluating the validity of a school desegregation plan and the progress made under that plan. United States v. Jefferson County Bd. of Educ., 372 F.2d 836 (5th Cir. 1966).

Including future guidelines. — Courts in the fifth circuit should give great weight to future HEW guidelines, when such guidelines are applicable to this circuit and are within lawful limits. United States v. Jefferson County Bd. of Educ., 380 F.2d 385 (5th Cir. 1967).

They establish minimum standards. — The 1965 and 1966 HEW guidelines establish minimum standards clearly applicable to disestablishing state-sanctioned segregation. These guidelines are within the decisions of the fifth circuit court of appeals, comply with the letter and spirit of the Civil Rights Act of 1964, and meet the requirements of the United States Constitution. United States v. Jefferson County Bd. of Educ., 380 F.2d 385 (5th Cir. 1967).

And are constitutional. — The HEW guidelines now in effect are constitutional and are within the statutory authority created in the Civil Rights Act of 1964. Schools therefore, in compliance with the guidelines can in general be regarded as discharging constitutional obligations. United States v. Jefferson County Bd. of Educ., 372 F.2d 836 (5th Cir. 1966).

They are within the scope of congressional and executive policies. — The HEW guidelines are within the scope of the congressional and executive policies embodied in the Civil Rights Act of 1964. United States v. Jefferson County Bd. of Educ., 372 F.2d 836 (5th Cir. 1966).

But approval not intended to prevent future suits.—Approval of the existing HEW guidelines and the deference owed to any future guidelines is not intended to deny a day in court to any person asserting individual rights or to any school board contesting HEW action. In any school desegregation case the issue concerns the constitutional rights of Negroes, individually and as a class, and the constitutional rights of the state—not the issue whether federal financial assistance should be withheld under Title VI of the Civil Rights Act of 1964. United States v. Jefferson County Bd. of Educ., 372 F.2d 836 (5th Cir. 1966).

Policy of fifth circuit is to encourage compliance with guidelines. — The policy of the fifth circuit court of appeals is one of encouraging the maximum legally permissible correlation between judicial standards for school desegregation and HEW guidelines. This policy may be applied without federal courts' abdicating their proper judicial function. The policy complies with the supreme court's increasing emphasis on more speed and less deliberation in school desegregation. It is consistent with the judiciary's duty to the nation to cooperate with the two other coordinate branches of government in carrying out the national policy expressed in the Civil Rights Act of 1964. United States v. Jefferson County Bd. of Educ., 372 F.2d 836 (5th Cir. 1966).

Since court approval is necessary for federal aid.—Because court approval of a school desegregation plan establishes eligibility for federal aid, the court's standards should not be lower than those of HEW. Unless judicial standards are substantially in accord with the guidelines, school boards previously resistent to desegregation will resort to the courts to avoid complying with the minimum standards HEW promulgates for schools that desegregate voluntarily. United States v. Jefferson County Bd. of Educ., 372 F.2d 836 (5th Cir. 1966).

§ **513(37). Legislative intent.**—It is the purpose of the legislature by this chapter to authorize the incorporation of educational building authorities as public corporations and as political subdivisions of the state for the purpose of providing ancillary improvements for use in connection with educational institutions in this state, and to invest each authority organized hereunder with all power that may be necessary or appropriate to enable it to accomplish such purpose, including but without limitation to the power to lease its properties and to issue interest-bearing revenue bonds. This chapter shall be liberally construed in conformity with the said intent. (1966, Ex. Sess., p. 311, § 2, appvd. Aug. 30, 1966.)

§ **513(38). Procedure to incorporate.** — By proceeding in the manner set forth herein, any number of natural persons, not less than three, may incorporate an educational building authority as a public corporation and as a political subdivision of the state. The said natural persons shall first file with the governing body of any municipality the proposed form of the certificate of incorporation of the authority, together with a written application seeking permission to apply for the incorporation of an authority for such municipality. Every such application shall also be accompanied by such supporting documents or evidence as the applicants may consider appropriate to show the need for an authority for the said municipality. The said governing body shall consider the said application and shall find and determine whether it is wise, expedient, necessary or advisable that the authority be formed; if the said governing body finds and determines that it is not wise, expedient, necessary or advisable that the authority be formed, it shall deny the application; but if it finds and determines that it is wise, expedient, necessary or advisable that the authority be formed and if it approves the proposed form of the certificate of incorporation of the authority, the governing body shall adopt a resolution declaring that it has reviewed the application and has found and determined as a matter of fact that it is wise, expedient, necessary or advisable that the authority be formed and declaring that it has approved the proposed form of certificate of incorporation of the authority. No authority shall be formed hereunder unless the application required by this section shall be made and unless the resolution for which provision is made in this section shall be adopted.

Within forty days following the adoption of a resolution in accordance with section 513(38) of this title, the applicants, or not less than three of the applicants, shall proceed to incorporate the authority by filing for record in the office of the judge of probate of the county in which the determining municipality shall be situated (or, if the determining municipality shall be situated in more than one county, then with the judge of probate of any county in which any part of the determining municipality shall be situated) a certificate of incorporation in the form approved by the governing body of the determining municipality, which certificate shall also comply in form and substance with the requirements of this section and shall be executed in the manner herein provided.

The certificate of incorporation of the authority shall state: (1) The names of the persons forming the authority, together with the residence of each thereof, and that each of them is a resident of and an owner of real property in the determining municipality, and that each of them is a duly qualified elector of the determining municipality; (2) the name of the authority (which shall include the words "public educational building authority" and the name of, or other reference to, the determining municipality); (3) the period for the duration of the authority (if the duration is to be perpetual, subject to the provisions of section 513(56) of this title, that fact shall be stated); (4) the name of the determining municipality, together with the date on which the governing body thereof adopted the resolution in accordance with section 513(38) of this title; (5) the location of the principal office of the authority, which shall be within the corporate limits of the determining municipality; and (6) any other matters relating to the authority that the incorporators may choose to insert and that are not inconsistent with this chapter or with the laws of the state. The certificate of incorporation shall be signed and acknowledged by the incorporators before an officer authorized by the laws of the state to take acknowledgments to deeds. When the certificate of incorporation is filed for record, there shall be attached to it (a) a certified copy of the resolution adopted by the governing body of the determining municipality in accordance with section 513(38) of this title and (b) a certificate by the secretary of state that the name proposed for the authority is not identical to that of any other corporation organized under the laws of the state or so nearly similar thereto as to lead to confusion and uncertainty. The judge of probate shall promptly examine all such documents and shall determine whether they are complete and regular on their face and whether the form and contents of the certificate of incorporation comply with the provisions of this chapter. If the judge of probate shall find that all such documents are complete and regular on their face and that the form and contents of the certificate of incorporation comply with the provisions of this chapter, he shall require all such documents to be recorded in a well-bound book in his office. Upon the filing of the said documents, the authority shall come into existence and shall constitute a public corporation and a political subdivision of the state under the name set forth in the said certificate of incorporation. The judge of probate shall thereupon send a notice to the secretary of state that the certificate of incorporation of the authority has been filed for record. (1966, Ex. Sess., p. 311, § 3, appvd. Aug. 30, 1966.)

§ **513(39). Amendments to certificate of incorporation.**—The certificate of incorporation of any authority incorporated under the provisions of this chapter may at any time and from time to time be amended in the manner provided in this section. The board of directors of the authority shall first adopt a resolution proposing an amendment to the certificate of incorporation, which amendment shall be set forth in full in the said resolution and may include any matters which might have been included in the original certificate of incorporation or which could be included in the certificate of incorporation of an authority organized on the date of the adoption of the said resolution proposing the amendment.

After the adoption by the board of a resolution proposing an amendment to the certificate of incorporation of the authority, the board shall file a written application with the governing body of the determining municipality. Such application shall: (1) State that it is wise, expedient, necessary or advisable for the said amendment to be made; and (2) request that the governing body of the determining municipality adopt a resolution declaring that it has reviewed the application and has found and determined as a matter of fact that it is wise, expedient, necessary or advisable for the said amendment to be made. Every such application shall be accompanied by a certified copy of the said resolution adopted by the board proposing the said amendment to the certificate of incorporation, together with such documents in support of the application as the board may consider appropriate. As promptly as may be practicable after the filing of the said application with it, the governing body of the determining municipality shall review the said application and shall find and determine whether it is wise, expedient, necessary or advisable for the said amendment to be made. In finding and determining whether it is wise, expedient, necessary or advisable for the said amendment to be made, the said governing body may consider, in conjunction with any other factors it may deem relevant, alternative means of accomplishing any lawful objective or purpose of the said amendment affecting the public interest. If the said governing body finds and determines that it is wise, expedient, necessary or advisable for the said amendment to be made, it shall adopt a resolution declaring that it has reviewed the said application and has found and determined as a matter of fact that it is wise, expedient, necessary or advisable for the said amendment to be made; if the said governing body finds and determines that it is not wise, expedient, necessary or advisable for the said amendment to be made, it shall deny the application.

Within forty days following the adoption by the governing body of the determining municipality of a resolution finding and determining as a matter of fact that it is wise, expedient, necessary or advisable for said amendment to be made, the chairman of the authority and the secretary of the authority shall sign, and file for record in the office of the judge of probate of the county in which the original certificate of incorporation was filed, a certificate in the name of and in behalf of the authority, under its seal, reciting the adoption of said respective resolutions by the board and by the said governing body, and setting forth the said proposed amendment. If the proposed amendment provides for a change in the name of the authority, there shall be filed, together with the certificate required by the immediately preceding sentence, a certificate by the secretary of state showing that the proposed new name of the authority is not identical to that of any other corporation then in existence and organized under the laws of this state, or so nearly similar to that of any other such corporation as to lead to confusion and uncertainty. The judge of probate shall promptly examine each such certificate and shall determine whether it is complete and regular on its face and whether the proposed amendment complies with the provisions of this chapter. If the judge of probate shall find that each such certificate is complete and regular on its face and that the proposed amendment complies with the provisions of this chapter, he shall require each such certificate to be recorded in a well-bound book in his office. Upon the filing of the aforesaid certificates, the said amendment to the certificate of incorporation shall become effective. If the proposed amendment effects a change in the name of the authority, the judge of probate shall promptly send a notice to the secretary of state, advising him of such change. (1966, Ex. Sess., p. 313, § 4, appvd. Aug. 30, 1966.)

§ **513(40). Board of directors.**—Each authority shall be governed by a board of directors. All powers of the authority shall be exercised by the board or pursuant to its authorization. The board shall consist of three directors elected, as soon as may be practicable after the organization of the authority, by the governing body of the determining municipality for staggered terms as follows: The first term of one director shall begin immediately upon his election and shall end at noon on the second Monday of November of the next succeeding odd-numbered calendar year following his election; the first term of another director shall begin immediately upon his election and shall end at noon on the second Monday of November of the second succeeding odd-numbered calendar year following his election; and the first term of the remaining director shall begin immediately upon his election and shall end at noon on the second Monday of November of the third succeeding odd-numbered calendar year following his election. Thereafter, the term of office of each director shall be six years, commencing at noon on the second Monday of November when the term of the immediate predecessor director ended. If at any time there should be a vacancy on the board, a successor director to serve for the unexpired term applicable to such vacancy shall be elected by the governing body of the determining municipality. Each election of a director subsequent to the selection of the initial directors, whether for a full six-year term or to complete an unexpired term, shall be made not earlier than thirty days prior to the date on which such director is to take office as such. No officer of the state or of any county or municipality shall, during his tenure as such officer, be eligible to serve as a director. Each director must be a qualified elector and the owner of real property in the determining municipality. Directors shall be eligible for reelection. Each director shall serve without compensation, except that he may be reimbursed for expenses actually incurred by him in and about the performance of his duties. A majority of the directors shall constitute a quorum for the transaction of business. No vacancy in the membership of the board shall impair the right of a quorum to exercise all of the powers and duties of the authority. Any director of the authority may be impeached and removed from office in the same manner and on the same grounds provided by section 175 of the Constitution of Alabama and the general laws of the state for impeachment and removal of the officers mentioned in said section 175. All proceedings of the board shall be reduced to writing by the secretary of the authority and recorded in a well-bound book. Copies of such proceedings, when certified by the secretary of the authority under the seal of the authority, shall be received in all courts as evidence of the matters therein certified. (1966, Ex. Sess., p. 315, § 5, appvd. Aug. 30, 1966.)

§ **513(41). Officers of authority.**—The officers of an authority shall consist of a chairman, vice-chairman, secretary, treasurer, and such other officers as its board shall deem necessary or appropriate. The offices of secretary and treasurer may but need not be held by the same person. The chairman and vice-chairman of an authority shall be elected by the board from its membership; the secretary, the treasurer, and any other officers of the authority may but need not be members of the board and shall also be elected by the board. The chairman and vice-chairman of the authority shall also be the chairman and vice chairman of the board, respectively. (1966, Ex. Sess., p. 316, § 6, appvd. Aug. 30, 1966.)

§ **513(42). Powers of authority.**—The authority shall have the following powers, together with all powers incidental thereto or necessary to the discharge thereof in corporate form: (1) To have succession by its corporate name for the duration of time (which may be in perpetuity, subject to the provisions of section 513(56) of this title specified in its certificate of corporation; (2) to sue and be sued in its own name in civil suits and actions and to defend suits against it; (3) to adopt and make use of a corporate seal and to alter the same at pleasure; (4) to adopt and alter bylaws for the regulation and conduct of its affairs and business; (5) to acquire, receive, and take by purchase, gift, lease, devise, or otherwise, and to hold property of every description, real, personal or mixed, wherever the same might be located; (6) to make, enter into, and execute such contracts, agreements, leases and other instruments and to take such other actions as may be necessary or convenient to accomplish any purpose for which the authority was organized or to exercise any power expressly granted hereunder; (7) to plan, establish, develop, acquire, purchase, lease, construct, reconstruct, improve, maintain and operate ancillary improvements in connection with educational institutions in the state, and to acquire real and personal property, franchises and easements deemed necessary or desirable in connection therewith; (8) to sell and issue bonds of the authority in order to provide funds for any corporate function, use, or purpose, which bonds shall be payable solely out of the revenues derived from the operation, lease or sale (or any combination of any thereof) of ancillary improvements of the authority in connection with educational institutions; (9) to assume obligations secured by a lien on, or payable out of or secured by a pledge of, the revenues from the operation, lease or sale (or any combination of any thereof) of ancillary improvements or any part thereof that may be acquired by the authority, any obligation so assumed to be payable by the authority solely out of the revenues derived from the operation, lease or sale (or any combination of any thereof) of any ancillary improvements, or part thereof, of the authority; (10) to pledge for payment of any bonds issued or obligations assumed by the authority any revenues from which those bonds or obligations are made payable as herein provided; (11) to execute and deliver, pursuant to the provisions of this section and of sections 513(46) and 513(47) of this title, mortgages and deeds of trust and trust indentures, or either; (12) to appoint, employ, contract with, and provide for the compensation of, such officers, employees and agents, including but without limitation to engineers, attorneys, architects, construction contractors, management consultants, and fiscal advisers, as the business of the authority may require; (13) to provide for such insurance as the board may deem advisable; (14) to invest any funds of the authority that the board may determine are not presently needed in the operation of its properties in bonds of the United States of America, bonds of the state, and interest-bearing bank deposits, or any thereof; (15) to cooperate with the United States of America, any agency or instrumentality thereof, the state, any person, or any combination of any of the foregoing; (16) to sell and convey any of its properties that may have become obsolete or worn out or that may no longer be needed or useful as or as a part of ancillary improvements in connection with educational institutions; (17) to enter into a management agreement or agreements with any person for the management by the authority, or by any lessee or assignee from the authority, of any ancillary improvements or part thereof, upon such terms and conditions as may be mutually agreeable; (18) to lease to one or more educational institutions any or all of its ancillary improvements and to charge and collect rent therefor and to terminate any such lease upon the failure of the lessee to comply with any of the obligations thereof; (19) to sell any of its ancillary improvements or part thereof, provided, that any such sale may be made only if any such sale would not constitute a breach of any then outstanding agreement on the part of the authority; and (20) to convey, with or without valuable consideration, any of its ancillary improvements or part thereof to the state, any one or more counties, municipalities, or educational institutions, provided, that such conveyance may be made (a) only with the consent of the governing body of the determining municipality, such consent to be evidenced by a resolution adopted by the said governing body, and (b) only if any such conveyance would not constitute a breach of any then outstanding mortgage and deed of trust, trust indenture, or other agreement to which the authority is a party. (1966, Ex. Sess., p. 316, § 7, appvd. Aug. 30, 1966.)

§ **513(43). Location of ancillary improvements.** — Any ancillary improvements of the authority may be located within or without or partially within and partially without the determining municipality, subject to the following conditions: (a) No such ancillary improvements, or part thereof, shall be located more than fifteen miles from the corporate limits of the determining municipality; (b) in no event shall any ancillary improvements or part thereof be located within the corporate limits or the police jurisdiction of a municipality in this state other than the determining municipality, unless the governing body of such other municipality has first adopted a resolution consenting to the location of such ancillary improvements or part thereof in the corporate limits or in the police jurisdiction of such municipality; and (c) no such ancillary improvements or part thereof shall be located in a county other than that (or those) in which the determining municipality (or part thereof) is situated unless the court of county commissioners, board of revenue or other governing body of such other county has first adopted a resolution consenting to the location of such ancillary improvements or part thereof in such county. (1966, Ex. Sess., p. 317, § 8, appvd. Aug. 30, 1966.)

§ **513(44). Lease by educational institutions of ancillary improvements.**—Any one or more educational institutions in the state, except those educational institutions to which the second paragraph of this section applies, are hereby authorized at any time and from time to time to enter into one or more lease agreements which the authority whereunder any one or more ancillary improvements or part thereof shall be leased by the authority to such educational institution for a term not exceeding fifty years; provided, the rentals under such lease agreement shall not be payable from any sources other than those specified in the lease agreement; and provided, further, the rentals shall not be payable by educational institutions out of funds appropriated by the state to or for the benefit of such educational institutions.

The state board of education and each city and county board of education (including each public body having jurisdiction over schools in a municipality or county) are each hereby authorized at any time and from time to time to enter into one or more lease agreements with the authority whereunder any one or more ancillary improvements or any part thereof shall be leased by the authority to such board of education for a term not longer than the then current fiscal year of the said board of education, but any such lease agreement may contain a grant to the said board of education of successive options of renewing the said lease agreement on the terms specified therein for any subsequent fiscal year or years of the said board of education; the said lease agreement may contain appropriate provisions as to the method by which such board of education may, at its election, exercise the said options, or any of them, as it may elect on the terms provided therein, and such other covenants and provisions as shall not be inconsistent with this chapter and as the authority and the said board of education may agree. The rental for each fiscal year during which any lease agreement between the authority and the said board of education shall be in effect shall be due in advance on the first day of the fiscal year, and the said rental for said fiscal year shall be payable, and any such covenant on the part of the said board of education shall be performed, solely out of the current revenues of the said board of education for such fiscal year; provided, the rentals shall be payable solely out of all or any portion (as may be specified in the said lease agreement) of the revenues of the particular educational institution for the benefit of which the ancillary improvements were leased; and provided, further, the rentals shall not be payable out of funds appropriated by the state to or for the benefit of any of the said educational institutions.

Neither the state, county, nor any municipality shall in any manner be liable for the performance of any obligation or agreement contained in any lease agreement between the authority and any one or more educational institutions. The rental payable and the covenants to be performed by an educational institution under the provisions of any such lease agreement shall never create a debt of the state or of any county or municipality in the state within the meaning of sections 213, 224, and 225 of the Constitution of Alabama. The securing of adequate ancillary improvements by educational institutions for use by them is hereby declared to constitute an essential function of educational institutions, and the rentals payable by such educational institutions for that purpose under any such lease agreement are and shall constitute necessary operating expenses of such educational institutions. (1966, Ex. Sess., p. 318, § 9, appvd. Aug. 30, 1966.)

§ **513(45). Remedies under lease agreements.**—If there be any default in the payment of any rental required to be paid or in the performance of any covenant required to be performed by any educational institution under the provisions of any lease agreement between such educational institution and an authority, the authority and any pledgee of such lease agreement, or either, may by appropriate proceedings at law or in equity enforce and compel payment of such rental and performance of such covenant. (1966, Ex. Sess., p. 319, § 10, appvd. Aug. 30, 1966.)

§ **513(46). Bonds of authority.**—All bonds issued by the authority shall be signed by its chairman and attested by its secretary, and the seal of the authority shall be affixed thereto, and any interest coupons applicable to the bonds of the authority shall be signed by the said chairman; provided, that a facsimile of the signature of one, but not both, of said officers may be printed or otherwise reproduced on any such bonds in lieu of his manually signing the same, a facsimile of the seal of the authority may be printed or otherwise reproduced on any such bonds in lieu of being manually affixed thereto, and a facsimile of the signature of the chairman of the authority may be printed or otherwise reproduced on any such interest coupons in lieu of his manually signing the same. Any such bonds may be executed and delivered by the authority at any time and from time to time, shall be in such form and denominations and of such tenor and maturities, shall contain such provisions not inconsistent with the provisions of this chapter, and shall bear such rate or rates of interest, payable and evidenced in such manner, as may be provided by resolution of its board. Bonds of the authority may be sold at either public or private sale in such manner and at such price or prices and at such time or times as may be determined by the board to be most advantageous. Any bond having a specified maturity more than ten years after its date shall be made subject to redemption at the option of the authority at the expiration of ten years from its date and on any interest payment date thereafter at such price or prices and after such notice or notices and on such terms and in such manner as may be provided in the resolution of the board wherein it is authorized to be issued. The principal of and interest on any bonds issued or obligations assumed by the authority may at any time (whether before, at or after maturity) and from time to time be refunded by the issuance of refunding bonds of the authority, which may be sold by the authority at public or private sale at such price or prices as may be determined by its board to be advantageous, or which may be exchanged for the bonds or other obligations to be refunded. The authority may pay all expenses, premiums and commissions which its board may deem necessary and advantageous in connection with any financing done by it. Issuance by the authority of one or more series of bonds for one or more purposes shall not preclude it from issuing other bonds in connection with the same ancillary improvements or any other ancillary improvements, but the resolutions whereunder any subsequent bonds may be issued shall recognize and protect any prior pledge or mortgage and deed of trust made for any prior issue of bonds unless in the proceeding authorizing such prior issue the right was reserved to issue subsequent bonds on a parity with such prior issue. All bonds issued by the authority shall be construed to be negotiable instruments although payable solely from a specified source. All obligations created or assumed and all bonds issued or assumed by the authority shall be solely and exclusively an obligation of the authority and shall not create an obligation or debt of the state or of any county or municipality, provided, that the provisions of this sentence shall not be construed to release the original obligor from liability on any bond or other obligation assumed by the authority. Any bonds issued by the authority shall be limited or special obligations of the authority payable solely out of the revenues of the authority specified in the resolutions authorizing those bonds. Any such proceedings may provide that the bonds therein authorized shall be payable solely out of the revenues derived from the operation or lease of all ancillary improvements owned by the authority, or solely out of the revenues from the operations or lease of any part of such ancillary improvements, regardless of the fact that those bonds may have been issued with respect to or for the benefit of only certain particular ancillary improvements of the authority. The authority may pledge for the payment of any of its bonds the revenues from which such bonds are payable, either with or without a pledge of any lease agreement and the rentals therefrom covering the ancillary improvements from which revenues so pledged shall be derived, and may execute and deliver a trust indenture evidencing any such pledge or a mortgage and deed of trust conveying as security for such bonds the ancillary improvements or any part thereof, the revenues or any part of the revenues from which are so pledged. Any mortgage and deed of trust or trust indenture made by the authority may contain such agreements as the board may deem advisable respecting the operation, maintenance and lease of the property and the use of the revenues subject to such mortgage and deed of trust or affected by such trust indenture, and respecting the rights, duties, and remedies of the parties to any such instrument and the parties for the benefit of whom such instrument is made. (1966, Ex. Sess., p. 319, § 11, appvd. Aug. 30, 1966.)

§ **513(47). Contracts to secure bonds and assumed obligations.**—As security for payment of the principal of and interest on bonds issued or obligations assumed by it, the authority may enter into a contract or contracts binding itself for the proper application of the proceeds of bonds and other funds, for the continued operation, maintenance and disposition (including lease) of any ancillary improvements or part thereof owned by it, for the imposition and collection of reasonable rentals from such ancillary improvements, for the disposition and application of its gross revenues or any part thereof, and for any other act or series of acts not inconsistent with the provisions of this chapter for the protection of the bonds and other obligations being secured and the assurance that the revenues from such ancillary improvements will be sufficient to operate such ancillary improvements, maintain the same in good repair and in good operating condition, pay the principal of and interest on any bonds payable from such revenues, and maintain such reserves as may be deemed appropriate for the protection of the bonds, the efficient operation of such ancillary improvements, and the making of replacements thereof and capital improvements thereto. Any contract made pursuant to the provisions of this section may be set forth in any resolution of the board authorizing the issuance of bonds or the assumption of obligations or in any mortgage and deed of trust, or trust indenture, made by the authority hereunder. (1966, Ex. Sess., p. 321, § 12, appvd. Aug. 30, 1966.)

§ **513(48). Statutory mortgage lien.**—Any resolution of the board or trust indenture, under which bonds may be issued pursuant to the provisions of this chapter, may contain provisions creating a statutory mortgage lien, in favor of the holders of such bonds and of the interest coupons applicable thereto, on the ancillary improvements or any part thereof (including any after-acquired property) out of the revenues from which such bonds are made payable. The said resolution of the board or the said trust indenture may provide for the filing for record in the office of the judge of probate of each county in which any part of such ancillary improvements may be located of a notice containing a brief description of such ancillary improvements and of the land relating thereto, a brief description of such bonds, and a declaration that the said statutory mortgage lien has been created upon such ancillary improvements (and upon such land as shall be made subject to the lien) for the benefit of the holders of such bonds and the interest coupons applicable thereto, including any additions thereto and extensions thereof. Each judge of probate shall receive, record and index any such notice filed for record in his office. The filing of such notice, as herein provided, shall operate as constructive notice of the contents thereof. Such lien shall be valid and binding against all parties having claims of any kind in tort, contract or otherwise against the authority, irrespective of whether the parties have actual notice thereof, from the time such notice is filed in the office of the judge of probate as herein provided. (1966, Ex. Sess., p. 322, § 13, appvd. Aug. 30, 1966.)

§ **513(49). Proceeds from sale of bonds.** — All moneys derived from the sale of any bonds issued by the authority shall be used solely for the purpose or purposes for which the same are authorized and any costs and expenses incidental thereto. Such costs and expenses may include but shall not be limited to (1) the engineering, legal, architectural, fiscal and other expenses incurred in connection with the issuance of the bonds, (2) in the case of bonds issued to pay costs of construction, interest on such bonds (or, if a part only of any series of bonds is issued for construction purposes, interest on that portion of the bonds of that series that is issued to pay construction costs) prior to and during such construction and for not exceeding one year after completion of such construction, and (3) in the case of bonds issued for the purpose of refunding principal and interest, or either, with respect to bonds issued or obligations assumed by the authority, any premium that it may be necessary to pay in order to redeem or retire the bonds or other obligations to be refunded. (1966, Ex. Sess., p. 322, § 14, appvd. Aug. 30, 1966.)

§ **513(50). Cooperation; aid from other public bodies.** — For the purpose of securing ancillary improvements in connection with educational institutions or aiding or cooperating with the authority in the planning, development, undertaking, construction, extension, improvement, operation or protection of ancillary improvements in connection with educational institutions, any county, municipality or other political subdivision, public corporation, agency or instrumentality of this state may, upon such terms and with or without consideration, as it may determine: (a) lend or donate money to, or perform services for the benefit of the authority; (b) donate, sell, convey, transfer, lease or grant to the authority, without the necessity of authorization at any election of qualified voters, any property of any kind, including but without limitation, any ancillary improvements or part thereof, and any interest in any thereof; and (c) do any and all things, whether or not specifically authorized in this section, not otherwise prohibited by law, that are necessary or convenient to aid and cooperate with the authority in the planning, undertaking, construction, or operation of ancillary improvements in connection with educational institutions. (1966, Ex. Sess., p. 323, § 15, appvd. Aug. 30, 1966.)

§ **513(51). Exemption from taxation.**—The authority, the property and income of the authority, all bonds issued by the authority, the income from such bonds, conveyances by or to the authority, and leases, mortgages and deeds of trust by or to the authority shall be exempt from all taxation in the state of Alabama. No license or excise tax may be imposed on any authority in respect of the privilege of engaging in any of the activities authorized by this chapter. (1966, Ex. Sess., p. 323, § 16, appvd. Aug. 30, 1966.)

§ **513(52). Freedom of authority from state supervision and control.**—This chapter is intended to aid the state in the execution of its duties by providing appropriate and independent instrumentalities of the state with full and adequate powers to fulfill their functions. Except as in this chapter expressly otherwise provided, no proceeding, notice or approval shall be required for the incorporation of any authority or the amendment of its certificate of incorporation, the acquisition of any property or ancillary improvements or the issuance of any bonds, mortgage and deed of trust, or trust indenture. Neither a public hearing nor the consent of the state department of finance shall be prerequisite to the issuance of bonds by the authority. (1966, Ex. Sess., p. 323, § 17, appvd. Aug. 30, 1966.)

§ **513(53). Earnings of authority.**—The authority shall be a nonprofit corporation and no part of its net earnings remaining after payment of its expenses shall inure to the benefit of any individual, association or corporation, except that in the event the board of directors of the authority shall determine that sufficient provision has been made for the full payment of the expenses, bonds and other obligations of the authority, then any net earnings thereafter accruing shall be paid to the determining municipality. (1966, Ex. Sess., p. 323, § 18, appvd. Aug. 30, 1966.)

§ **513(54). Investments in bonds of authority.** — Unless otherwise directed by the court having jurisdiction thereof, or by the document that is the source of authority, a trustee, executor, administrator, guardian, or one acting in any other fiduciary capacity may, in addition to any other investment powers conferred by law and with the exercise of reasonable business prudence, invest trust and other fiduciary funds in bonds of the authority. (1966, Ex. Sess., p. 324, § 19, appvd. Aug. 30, 1966.)

§ **513(55). Notice of bond resolution.**—Upon the adoption by the board of any resolution providing for the issuance of bonds, the authority may, in its discretion, cause to be published once a week for two consecutive weeks, in a newspaper published in the determining municipality, or if there is no newspaper published in the determining municipality then in a newspaper published in the county in which the determining municipality or any part thereof is located, a notice in substantially the following form (the blanks being properly filled in) at the end of which shall be printed the name and title of either the chairman or secretary of the authority: "................ ...., a public corporation and a political subdivision of the state of Alabama, on the .... day of ...., authorized the issuance of $........... principal amount of revenue bonds of the said public corporation for purposes authorized in the act of the legislature of Alabama under which the said public corporation was organized. Any action or proceeding questioning the validity of the said bonds, or the pledge and the indenture to secure the same, or the proceedings authorizing the same, must be commenced within twenty days after the first publication of this notice."

Any action or proceeding in any court to set aside or question the proceedings for the issuance of the bonds referred to in said notice or to contest the validity of any such bonds, or the validity of the pledge and indenture made therefor, must be commenced within twenty days after the first publication of such notice. After the expiration of the said period no right of action or defense questioning or attacking the validity of the said proceedings or of the said bonds or the said pledge or indenture shall be asserted, nor shall the validity of the said proceedings, bonds, pledge or indenture be open to question in any court on any ground whatsoever except in an action commenced within such period. (1966, Ex. Sess., p. 324, § 20, appvd. Aug. 30, 1966.)

§ **513(56). Dissolution of authority and vesting of title to its properties.**—At any time when the authority does not have any bonds outstanding and when there shall be no obligations assumed by the authority that are then outstanding, the board may adopt a resolution, which shall be duly entered upon its minutes, declaring that the authority shall be dissolved. Upon the filing for record of a certified copy of said resolution in the office of the judge of probate of the county in which the authority's original certificate of incorporation was filed, the authority shall thereupon stand dissolved, and in the event it owned any property at the time of its dissolution the title to all its property shall thereupon vest in the determining municipality. In the event the authority shall at any time have outstanding bonds issued hereunder payable out of the revenues from various ancillary improvements, then as and when the principal of and the interest on all bonds payable, in whole or in part, from the revenues derived from any particular ancillary improvements shall have been paid in full, title to the ancillary improvements with respect to which the bonds so paid in full have been paid shall thereupon vest in the determining municipality, but such vesting of title in the determining municipality shall not affect the title of the authority to any other ancillary improvements the revenues from which are pledged for the payment of any other bonds then outstanding. The formation of one or more authorities under the provisions of this chapter shall not prevent the subsequent formation hereunder of other authorities with respect to the same determining municipality. (1966, Ex. Sess., p. 325, § 21, appvd. Aug. 30, 1966.)

CHAPTER 27E.

EDUCATIONAL BUILDING AUTHORITIES.

Sec.

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§ 513(57). Definitions and use of phrases.—The following words and phrases used in this chapter, and others evidently intended as the equivalent thereof, shall, in the absence of clear implication herein otherwise, be given the following respective interpretations herein:

"Ancillary improvements" means educational and related facilities of every kind including, but without limitation to, classrooms, scientific and other laboratories, libraries, auditoriums, gymnasiums, cafeterias, dining rooms, dormitories, student and faculty apartments, student union buildings, recreational and social facilities, student and faculty infirmaries and clinics, and facilities for washing, laundering and cleaning clothing and fabrics of every kind, or any combination of any thereof, and shall also include equipment and furniture and fixtures used or useful in educational and related facilities of every kind.

"Applicant" means a natural person who files a written application with the governing body of any municipality in accordance with the provisions of section 513(59) of this title.

"Authority" means any public corporation organized pursuant to the provisions of this chapter.

"Board" means the board of directors of an authority.

"Bonds" means bonds, notes and certificates representing an obligation to pay money.

"Construction" and "construct" have reference to (1) the construction of new buildings and the expansion, remodeling, and alteration of existing buildings, and (2) the equipment and furnishing of new buildings and existing buildings, whether or not expanded, remodeled, or altered.

"County" means any county in the state.

"Determining municipality" means any municipality the governing body of which shall have made findings and determinations of fact in accordance with the provisions of section 513(59) of this title.

"Director" means a member of the board of directors of the authority.

"Educational institutions" means every college, university, graduate school, professional school, junior college, elementary school, secondary school, business college, every institution for education and training of the deaf, blind or mentally retarded, and any other school that teaches a trade or a profession, but shall not include any state educational institution as herein defined.

"Governing body" means the council, commission, or other like governing body of a municipality.

"Incorporators" means the persons forming a public corporation organized pursuant to the provisions of this chapter.

"Municipality" means an incorporated city or town of the state.

"Person" means a natural person, a public or private corporation, a municipality, a county, or an agency, department or instrumentality of the state or of a county or municipality.

"Property" means and includes real and personal property, and interests therein.

"State" means the state of Alabama.

"State educational institutions" means every college, university, graduate school, professional school, junior college, trade school, elementary school, secondary school, and every institution for education and training of the deaf, blind or mentally retarded, heretofore or hereafter established or acquired under statutory authorization of the legislature of Alabama and existing as public institutions of learning supported in substantial part by state appropriations, or by revenues derived from taxation.

"Herein," "hereby," "hereunder," "hereof," and other equivalent words refer to this chapter as an entirety and not solely to the particular section or portion thereof in which any such word is used.

The definitions set forth herein shall be deemed applicable whether the words defined are used in the singular or plural. Whenever used herein any pronoun or pronouns shall be deemed to include both singular and plural and to cover all genders.

Whenever in this chapter any power is given to an educational institution, or whenever reference is made to any action by an educational institution, such power shall extend to and may be exercised by the board of trustees or other body having general supervisory power over the educational institution. (1966, Ex. Sess., p. 326, § 1, appvd. Aug. 30, 1966.)

§ **513(58). Legislative intent.**—It is the purpose of the legislature by this chapter to authorize the incorporation of educational building authorities as public corporations and as political subdivisions of the state for the purpose of providing ancillary improvements for use in connection with educational institutions in this state, and to invest each authority organized hereunder with all power that may be necessary or appropriate to enable it to accomplish such purpose, including but without limitation to the power to lease its properties and to issue interest-bearing revenue bonds. This chapter shall be liberally construed in conformity with the said intent. (1966, Ex. Sess., p. 328, § 2, appvd. Aug. 30, 1966.)

§ **513(59). Procedure to incorporate.**—By proceeding in the manner set forth herein, any number of natural persons, not less than three, may incorporate an educational building authority as a public corporation and as a political subdivision of the state. The said natural persons shall first file with the governing body of any municipality the proposed form of the certificate of incorporation of the authority, together with a written application seeking permission to apply for the incorporation of an authority for such municipality. Every such application shall also be accompanied by such supporting documents or evidence as the applicants may consider appropriate to show the need for an authority for the said municipality. The said governing body shall consider the said application and shall find and determine whether it is wise, expedient, necessary or advisable that the authority be formed; if the said governing body finds and determines that it is not wise, expedient, necessary or advisable that the authority be formed, it shall deny the application; but if it finds and determines that it is wise, expedient, necessary or advisable that the authority be formed and if it approves the proposed form of the certificate of incorporation of the authority, the governing body shall adopt a resolution declaring that it has reviewed the application and has found and determined as a matter of fact that it is wise, expedient, necessary or advisable that the authority be formed and declaring that it has approved the proposed form of certificate of incorporation of the authority. No authority shall be formed hereunder unless the application required by this section shall be made and unless the resolution for which provision is made in this section shall be adopted.

Within forty days following the adoption of a resolution in accordance with section 513(59) of this title, the applicants, or not less than three of the applicants, shall proceed to incorporate the authority by filing for record in the office of the judge of probate of the county in which the determining municipality shall be situated (or, if the determining municipality shall be situated in more than one county, then with the judge of probate of any county in which any part of the determining municipality shall be situated) a certificate of incorporation in the form approved by the governing body of the determining municipality, which certificate shall also comply in form and substance with the requirements of this section and shall be executed in the manner herein provided.

The certificate of incorporation of the authority shall state: (1) The names of the persons forming the authority, together with the residence of each thereof, and that each of them is a resident of and an owner of real property in the determining municipality, and that each of them is a duly qualified elector of the determining municipality; (2) the name of the authority (which shall include the words "educational building authority" and the name of, or other reference to, the determining municipality); (3) the period for the duration of the authority (if the duration is to be perpetual, subject to the provisions of section 21 hereof, that fact shall be stated); (4) the name of the determining municipality, together with the date on which the governing body thereof adopted the resolution in accordance with section 513(59) of this title; (5) the location of the principal office of the authority, which shall be within the corporate limits of the determining municipality; and (6) any other matters relating to the authority that the incorporators may choose to insert and that are not inconsistent with this chapter or with the laws of the state. The certificate of incorporation shall be signed and acknowledged by the incorporators before an officer authorized by the laws of the state to take acknowledgments to deeds. When the certificate of incorporation is filed for record, there shall be attached to it (a) a certified copy of the resolution adopted by the governing body of the determining municipality in accordance with section 513(59) of this title and (b) a certificate by the secretary of state that the name proposed for the authority is not identical to that of any other corporation organized under the laws of the state or so nearly similar thereto as to lead to confusion and uncertainty. The judge of probate shall promptly examine all such documents and shall determine whether they are complete and regular on their face and whether the form and contents of the certificate of incorporation comply with the provisions of this chapter. If the judge of probate shall find that all such documents are complete and regular on their face and that the form and contents of the certificate of incorporation comply with the provisions of this chapter, he shall require all such documents to be recorded in a well-bound book in his office. Upon the filing of the said documents, the authority shall come into existence and shall constitute a public corporation and a political subdivision of the state under the name set forth in the said certificate of incorporation. The judge of probate shall thereupon send a notice to the secretary of state that the certificate of incorporation of the authority has been filed for record. (1966, Ex. Sess., p. 329, § 3, appvd. Aug. 30, 1966.)

Note. — Acts 1966, Ex. Sess., p. 326, from which this chapter was codified, contains no section numbered 21.

§ 513(60). Amendments to certificate of incorporation. — The certificate of incorporation of any authority incorporated under the provisions of this chapter may at any time and from time to time be amended in the manner provided in this section. The board of directors of the authority shall first adopt a resolution proposing an amendment to the certificate of incorporation, which amendment shall be set forth in full in the said resolution and may include any matters which might have been included in the original certificate of incorporation or which could be included in the certificate of incorporation of an authority organized on the date of the adoption of the said resolution proposing the amendment.

After the adoption by the board of a resolution proposing an amendment to the certificate of incorporation of the authority, the board shall file a written application with the governing body of the determining municipality. Such application shall: (1) state that it is wise, expedient, necessary or advisable for the said amendment to be made; and (2) request that the governing body of the determining municipality adopt a resolution declaring that it has reviewed the application and has found and determined as a matter of fact that it is wise, expedient, necessary or advisable for the said amendment to be made. Every such application shall be accompanied by a certified copy of the said resolution adopted by the board proposing the said amendment to the certificate of incorporation, together with such documents in support of the application as the board may consider appropriate. As promptly as may be practicable after the filing of the said application with it, the governing body of the determining municipality shall review the said application and shall find and determine whether it is wise, expedient, necessary or advisable for the said amendment to be made. In finding and determining whether it is wise, expedient, necessary or advisable for the said amendment to be made, the said governing body may consider, in conjunction with any other factors it may deem relevant, alternative means of accomplishing any lawful objective or purpose of the said amendment affecting the public interest. If the said governing body finds and determines that it is wise, expedient, necessary or advisable for the said amendment to be made, it shall adopt a resolution declaring that it has reviewed the said application and has found and determined as a matter of fact that it is wise, expedient, necessary or advisable for the said amendment to be made; if the said governing body finds and determines that it is not wise, expedient, necessary or advisable for the said amendment to be made, it shall deny the application.

Within forty days following the adoption by the governing body of the determining municipality of a resolution finding and determining as a matter of fact that it is wise, expedient, necessary or advisable for said amendment to be made, the chairman of the authority and the secretary of the authority shall sign, and file for record in the office of the judge of probate of the county in which the original certificate of incorporation was filed, a certificate in the name of and in behalf of the authority, under its seal, reciting the adoption of said respective resolutions by the board and by the said governing body, and setting forth the said proposed amendment. If the proposed amendment provides for a change in the name of the authority, there shall be filed, together with the certificate required by the immediately preceding sentence, a certificate by the secretary of state showing that the proposed new name of the authority is not identical to that of any other corporation then in existence and organized under the laws of this state, or so nearly similar to that of any other such corporation as to lead to confusion and uncertainty. The judge of probate shall promptly examine each such certificate and shall determine whether it is complete and regular on its face and whether the proposed amendment complies with the provisions of this chapter. If the judge of probate shall find that each such certificate is complete and regular on its face and that the proposed amendment complies with the provisions of this chapter, he shall require each such certificate to be recorded in a well-bound book in his office. Upon the filing of the aforesaid certificates, the said amendment to the certificate of incorporation shall become effective. If the proposed amendment effects a change in the name of the authority, the judge of probate shall promptly send a notice to the secretary of state, advising him of such change. (1966, Ex. Sess., p. 330, § 4, appvd. Aug. 30, 1966.)

§ **513(61). Board of directors.**—Each authority shall be governed by a board of directors. All powers of the authority shall be exercised by the board or pursuant to its authorization. The board shall consist of three directors elected, as soon as may be practicable after the organization of the authority, by the governing body of the determining municipality for staggered terms as follows: The first term of one director shall begin immediately upon his election and shall end at noon on the second Monday of November of the next succeeding odd-numbered calendar year following his election; the first term of another director shall begin immediately upon his election and shall end at noon on the second Monday of November of the second succeeding odd-numbered calendar year following his election; and the first term of the remaining director shall begin immediately upon his election and shall end at noon on the second Monday of November of the third succeeding odd-numbered calendar year following his election. Thereafter, the term of office of each director shall be six years, commencing at noon on the second Monday of November when the term of the immediate predecessor director ended. If at any time there should be a vacancy on the board, a successor director to serve for the unexpired term applicable to such vacancy shall be elected by the governing body of the determining municipality. Each election of a director subsequent to the selection of the initial directors, whether for a full six-year term or to complete an unexpired term, shall be made not earlier than thirty days prior to the date on which such director is to take office as such. No officer of the state or of any county or municipality shall, during his tenure as such officer, be eligible to serve as a director. Each director must be a qualified elector and the owner of real property in the determining municipality. Directors shall be eligible for reelection. Each director shall serve without compensation, except that he may be reimbursed for expenses actually incurred by him in and about the performance of his duties. A majority of the directors shall constitute a quorum for the transaction of business. No vacancy in the membership of the board shall impair the right of a quorum to exercise all of the powers and duties of the authority. Any director of the authority may be impeached and removed from office in the same manner and on the same grounds provided by section 175 of the Constitution of Alabama and the general laws of the state for impeachment and removal of the officers mentioned in said section 175. All proceedings of the board shall be reduced to writing by the secretary of the authority and recorded in a well-bound book. Copies of such proceedings, when certified by the secretary of the authority under the seal of the authority, shall be received in all courts as evidence of the matters therein certified. (1966, Ex. Sess., p. 332, § 5, appvd. Aug. 30, 1966.)

§ **513(62). Officers of authority.**—The officers of an authority shall consist of a chairman, vice-chairman, secretary, treasurer, and such other officers as its board shall deem necessary or appropriate. The offices of secretary and treasurer may but need not be held by the same person. The chairman and vice-chairman of an authority shall be elected by the board from its membership; the secretary, the treasurer, and any other officers of the authority may but need not be members of the board and shall also be elected by the board. The chairman and vice-chairman of the authority shall also be the chairman and vice-chairman of the board, respectively. (1966, Ex. Sess., p. 333, § 6, appvd. Aug. 30, 1966.)

§ **513(63). Powers of authority.**—The authority shall have the following powers, together with all powers incidental thereto or necessary to the discharge thereof in corporate form: (1) To have succession by its corporate name for the duration of time (which may be in perpetuity, subject to the provisions of section 21 hereof) specified in its certificate of incorporation; (2) to sue and be sued in its own name in civil suits and actions and to defend suits against it; (3) to adopt and make use of a corporate seal and to alter the same at pleasure; (4) to adopt and alter bylaws for the regulation and conduct of its affairs and business; (5) to acquire, receive, and take, by purchase, gift, lease, devise, or otherwise, and to hold property of every description, real, personal or mixed, wherever the same might be located; (6) to make, enter into, and execute such contracts, agreements, leases and other instruments and to take such other actions as may be necessary or convenient to accomplish any purpose for which the authority was organized or to exercise any power expressly granted hereunder; (7) to plan, establish, develop, acquire, purchase, lease, construct, reconstruct, improve, maintain and operate ancillary improvements in connection with educational institutions in the state, and to acquire real and personal property, franchises and easements deemed necessary or desirable in connection therewith; (8) to sell and issue bonds of the authority in order to provide funds for any corporate function, use, or purpose, which bonds shall be payable solely out of the revenues derived from the operation, lease or sale (or any combination of any thereof) of ancillary improvements of the authority in connection with educational institutions; (9) to assume obligations secured by a lien on, or payable out of or secured by a pledge of, the revenues from the operation, lease or sale (or any combination of any thereof) of ancillary improvements or any part thereof that may be acquired by the authority, any obligation so assumed to be payable by the authority solely out of the revenues derived from the operation, lease or sale (or any combination of any thereof) of any ancillary improvements, or part thereof, of the authority; (10) to pledge for payment of any bonds issued or obligations assumed by the authority any revenues from which those bonds or obligations are made payable as herein provided; (11) to execute and deliver, pursuant to the provisions of this section and of sections 513(67) and 513(68) of this title, mortgages and deeds of trust and trust indentures, or either; (12) to appoint, employ, contract with, and provide for the compensation of, such officers, employees and agents, including but without limitation to engineers, attorneys, architects, construction contractors, management consultants, and fiscal advisers, as the business of the authority may require; (13) to provide for such insurance as the board may deem advisable; (14) to invest any funds of the authority that the board may determine are not presently needed in the operation of its properties in bonds of the United States of America, bonds of the state, and interest-bearing bank deposits, or any thereof; (15) to cooperate with the United States of America, any agency or instrumentality thereof, the state, any person, or any combination of any of the foregoing; (16) to sell and convey any of its properties that may have become obsolete or worn out or that may no longer be needed or useful as or as a part of ancillary improvements in connection with educational institutions; (17) to enter into a management agreement or agreements with any person for the management by the authority, or by any lessee or assignee from the authority, of any ancillary improvements or part thereof, upon such terms and conditions as may be mutually agreeable; (18) to lease to any one or more persons or to any one or more educational institutions any or all of its ancillary improvements and to charge and collect rent therefor and to terminate any such lease upon the failure of the lessee to comply with any of the obligations thereof; (19) to sell any of its ancillary improvements or part thereof, provided, that any such sale may be made only if such sale would not constitute a breach of any then outstanding agreement on the part of the authority. (1966, Ex. Sess., p. 333, § 7, appvd. Aug. 30, 1966.)

Note. — Acts 1966, Ex. Sess., p. 326, from which this chapter was codified, contains no section numbered 21.

§ **513(64). Location of ancillary improvements.** — Any ancillary improvements of the authority may be located within or without or partially within and partially without the determining municipality, subject to the following conditions; (a) No such ancillary improvements, or part thereof, shall be located more than fifteen miles from the corporate limits of the determining municipality; (b) in no event shall any ancillary improvements or part thereof be located within the corporate limits or the police jurisdiction of a municipality in this state other than the determining municipality, unless the governing body of such other municipality has first adopted a resolution consenting to the location of such ancillary improvements or part thereof in the corporate limits or in the police jurisdiction of such municipality; and (c) no such ancillary improvements or part thereof shall be located in a county other than that (or those) in which the determining municipality (or part thereof) is situated unless the court of county commissioners, board of revenue or other governing body of such other county has first adopted a resolution consenting to the location of such ancillary improvements or part thereof in such county. (1966, Ex. Sess., p. 335, § 8, appvd. Aug. 30, 1966.)

§ **513(65). Remedies under lease agreements.** — If there be any default in the payment of any rental required to be paid or in the performance of any covenant required to be performed by any educational institution under the provisions of any lease agreement between such educational institution and an authority, the authority and any pledgee of such lease agreement, or either, may by appropriate proceedings at law or in equity enforce and compel payment of such rental and performance of such covenant. (1966, Ex. Sess., p. 335, § 9, appvd. Aug. 30, 1966.)

§ **513(66). Bonds of authority.**—All bonds issued by the authority shall be signed by its chairman and attested by its secretary, and the seal of the authority shall be affixed thereto, and any interest coupons applicable to the bonds of the authority shall be signed by the said chairman; provided, that a facsimile of the signature of one, but not both, of said officers may be printed or otherwise reproduced on any such bonds in lieu of his manually signing the same, a facsimile of the seal of the authority may be printed or otherwise reproduced on any such bonds in lieu of being manually affixed thereto, and a facsimile of the signature of the chairman of the authority may be printed or otherwise reproduced on any such interest coupons in lieu of his manually signing the same. Any such bonds may be executed and delivered by the authority at any time and from time to time, shall be in such form and denominations and of such tenor and maturities, shall contain such provisions not inconsistent with the provisions of this chapter, and shall bear such rate or rates of interest, payable and evidenced in such manner, as may be provided by resolution of its board. Bonds of the authority may be sold at either public or private sale in such manner and at such price or prices and at such time or times as may be determined by the board to be most advantageous. Any bond having a specified maturity more than ten years after its date shall be made subject to redemption at the option of the authority at the expiration of ten years from its date and on any interest payment date thereafter at such price or prices and after such notice or notices and on such terms and in such manner as may be provided in the resolution of the board wherein it is authorized to be issued. The principal of and interest on any bonds issued or obligations assumed by the authority may at any time (whether before, at or after maturity) and from time to time be refunded by the issuance of refunding bonds of the authority, which may be sold by the authority at public or private sale at such price or prices as may be determined by its board to be advantageous, or which may be exchanged for the bonds or other obligations to be refunded. The authority may pay all expenses, premiums and commissions which its board may deem necessary and advantageous in connection with any financing done by it. Issuance by the authority of one or more series of bonds for one or more purposes shall not preclude it from issuing other bonds in connection with the same ancillary improvements or any other ancillary improvements, but the resolutions whereunder any subsequent bonds may be issued shall recognize and protect any prior pledge or mortgage and deed of trust made for any prior issue of bonds unless in the proceedings authorizing such prior issue the right was reserved to issue subsequent bonds on a parity with such prior issue. All bonds issued by the authority shall be construed to be negotiable instruments although payable solely from a specified source. All obligations created or assumed and all bonds issued or assumed by the authority shall be solely and exclusively an obligation of the authority and shall not create an obligation or debt of the state or of any county or municipality; provided, that the provisions of this sentence shall not be construed to release the original obligor from liability on any bond or other obligation assumed by the authority. Any bonds issued by the authority shall be limited or special *obligations of the authority payable solely out of the revenues of the* authority specified in the resolutions authorizing those bonds. Any such proceedings may provide that the bonds therein authorized shall be payable solely out of the revenues derived from the operation or lease of all ancillary improvements owned by the authority, or solely out of the revenues from the operations, or lease of any part of such ancillary improvements, regardless of the fact that those bonds may have been issued with respect to or for the benefit of only certain particular ancillary improvements of the authority. The authority may pledge for the payment of any of its bonds the revenues from which such bonds are payable, either with or without a pledge of any lease agreement and the rentals therefrom covering the ancillary improvements from which revenues so pledged shall be derived, and may execute and deliver a trust indenture evidencing any such pledge or a mortgage and deed of trust conveying as security for such bonds the ancillary improvements or any part thereof, the revenues or any part of the revenues from which are so pledged. Any mortgage and deed of trust or trust indenture made by the authority may contain such agreements as the board may deem advisable respecting the operation, maintenance and lease of the property and the use of the revenues subject to such mortgage and deed of trust or affected by such trust indenture, and respecting the rights, duties, and remedies of the parties to any such instrument and the parties for the benefit of whom such instrument is made. (1966, Ex. Sess., p. 335, § 10, appvd. Aug. 30, 1966.)

§ **513(67). Contracts to secure bonds and assumed obligations.**—As security for payment of the principal of and interest on bonds issued or obligations assumed by it, the authority may enter into a contract or contracts binding itself for the proper application of the proceeds of bonds and other funds, for the continued operation, maintenance and disposition (including lease) of any ancillary improvements or part thereof owned by it, for the imposition and collection of reasonable rentals from such ancillary improvements, for the disposition and application of its gross revenues or any part thereof, and for any other act or series of acts not inconsistent with the provisions of this chapter for the protection of the bonds and other obligations being secured and the assurance that the revenues from such ancillary improvements will be sufficient to operate such ancillary improvements, maintain the same in good repair and in good operating condition, pay the principal of and interest on any bonds payable from such revenues, and maintain such reserves as may be deemed appropriate for the protection of the bonds, the efficient operation of such ancillary improvements, and the making of replacements thereof and capital improvements thereto. Any contract made pursuant to the provisions of this section may be set forth in any resolution of the board authorizing the issuance of bonds or the assumption of obligations or in any mortgage and deed of trust, or trust indenture, made by the authority hereunder. (1966, Ex. Sess., p. 337, § 11, appvd. Aug. 30, 1966.)

§ **513(68). Statutory mortgage lien.**—Any resolution of the board or trust indenture, under which bonds may be issued pursuant to the provisions of this chapter, may contain provisions creating a statutory mortgage lien, in favor of the holders of such bonds and of the interest coupons applicable thereto, on the ancillary improvements or any part thereof (including any after-acquired property) out of the revenues from which such bonds are made payable. The said resolution of the board or the said trust indenture may provide for the filing for record in the office of the judge of probate of each county in which any part of such ancillary improvements may be located of a notice containing a brief description of such ancillary improvements and of the land relating thereto, a brief description of such bonds, and a declaration that the said statutory mortgage lien has been created upon such ancillary improvements (and upon such land as shall be made subject to the lien) for the benefit of the holders of such bonds and the interest coupons applicable thereto, including any additions thereto and extensions thereof. Each judge of probate shall receive, record and index any such notice filed for record in his office. The filing of such notice, as herein provided, shall operate as constructive notice of the contents thereof. Such lien shall be valid and binding against all parties having claims of any kind in tort, contract or otherwise against the authority, irrespective of whether the parties have actual notice thereof, from the time such notice is filed in the office of the judge of probate as herein provided. (1966, Ex. Sess., p. 338, § 12, appvd. Aug. 30, 1966.)

§ **513(69). Proceeds from sale of bonds.** — All moneys derived from the sale of any bonds issued by the authority shall be used solely for the purpose or purposes for which the same are authorized and any costs and expenses incidental thereto. Such costs and expenses may include but shall not be limited to (1) the engineering, legal, architectural, fiscal and other expenses incurred in connection with the issuance of the bonds, (2) in the case of bonds issued to pay costs of construction, interest on such bonds (or, if a part only of any series of bonds is issued for construction purposes, interest on that portion of the bonds of that series that is issued to pay construction costs) prior to and during such construction and for not exceeding one year after completion of such construction, and (3) in the case of bonds issued for the purpose of refunding principal and interest, or either, with respect to bonds issued or obligations assumed by the authority, any premium that it may be necessary to pay in order to redeem or retire the bonds or other obligations to be refunded. (1966, Ex. Sess., p. 338, § 13, appvd. Aug. 30, 1966.)

§ **513(70). Exemption from taxation.** — The authority, the property and income of the authority, all bonds issued by the authority, the income from such bonds, conveyances by or to the authority, and leases, mortgages, and deeds of trust by or to the authority shall be exempt from all taxation in the state of Alabama. No license or excise tax may be imposed on any authority in respect of the privilege of engaging in any of the activities authorized by this chapter. (1966, Ex. Sess., p. 339, § 14, appvd. Aug. 30, 1966.)

§ **513(71) Freedom of authority from state supervision and control.**—This chapter is intended to aid the state in the execution of its duties by providing appropriate and independent instrumentalities of the state with full and adequate powers to fulfill their functions. Except as in this chapter expressly otherwise provided, no proceeding, notice or approval shall be required for the incorporation of any authority or the amendment of its certificate of incorporation, the acquisition of any property or ancillary improvements or the issuance of any bonds, mortgage and deed of trust, or trust indenture. Neither a public hearing nor the consent of the state department of finance shall be prerequisite to the issuance of bonds by the authority. (1966, Ex. Sess., p. 339, § 15, appvd. Aug. 30, 1966.)

§ **513(72). Earnings of authority.**—The authority shall be a nonprofit corporation and no part of its net earnings remaining after payment of its expenses shall inure to the benefit of any individual, association or corporation, except that in the event the board of directors of the authority shall determine that sufficient provision has been made for the full payment of the expenses, bonds and other obligations of the authority, then any net earnings hereafter accruing shall be paid to the determining municipality. (1966, Ex. Sess., p. 339, § 16, appvd. Aug. 30, 1966.)

§ **513(73). Investments in bonds of authority.** — Unless otherwise directed by the court having jurisdiction thereof, or by the document that is the source of authority, a trustee, executor, administrator, guardian, or one acting in any other fiduciary capacity may, in addition to any other investment powers conferred by law and with the exercise of reasonable business prudence, invest trust and other fiduciary funds in bonds of the authority. (1966, Ex. Sess., p. 339, § 17, appvd. Aug. 30, 1966.)

§ **513(74). Notice of bond resolution.**—Upon the adoption by the board of any resolution providing for the issuance of bonds, the authority may, in its discretion, cause to be published once a week for two consecutive weeks, in a newspaper published in the determining municipality, or if there is no newspaper published in the determining municipality then in a newspaper published in the county in which the determining municipality or any part thereof is located, a notice in substantially the following form (the blanks being properly filled in) at the end of which shall be printed the name and title of either the chairman or secretary of the authority: "..................., a public corporation and a political subdivision of the state of Alabama, on the .... day of ...., authorized the issuance of $.......... principal amount of revenue bonds of the said public corporation for purposes authorized in the act of the legislature of Alabama under which the said public corporation was organized. Any action or proceeding questioning the validity of the said bonds, or the pledge and the indenture to secure the same, or the proceedings authorizing the same, must be commenced within twenty days after the first publication of this notice."

Any action or proceeding in any court to set aside or question the proceedings for the issuance of the bonds referred to in said notice or to contest the validity of any such bonds, or the validity of the pledge and indenture made therefor, must be commenced within twenty days after the first publication of such notice. After the expiration of the said period no right of action or defense questioning or attacking the validity of the said proceedings or of the said bonds or the said pledge or indenture shall be asserted, nor shall the validity of the said proceedings, bonds, pledge or indenture be open to question in any court on any ground whatsoever except in an action commenced within such period. (1966, Ex. Sess., p. 339, § 18, appvd. Aug. 30, 1966.)

§ **513(75). Dissolution of authority and vesting of title to its properties.**—At any time when the authority does not have any bonds outstanding and when there shall be no obligations assumed by the authority that are then outstanding, the board may adopt a resolution, which shall be duly entered upon its minutes, declaring that the authority shall be dissolved. Upon the filing for record of a certified copy of said resolution in the office of the judge of probate of the county in which the authority's original certificate of incorporation was filed, the authority shall thereupon stand dissolved, and in the event it owned any property at the time of its dissolution the title to all its property shall thereupon vest in the determining municipality. In the event the authority shall at any time have outstanding bonds issued hereunder payable out of the revenues from various ancillary improvements, then as and when the principal of and the interest on all bonds payable, in whole or in part, from the revenues derived from any particular ancillary improvements shall have been paid in full, title to the ancillary improvements with respect to which the bonds so paid in full have been paid shall thereupon vest in the determining municipality, but such vesting of title in the determining municipality shall not affect the title of the authority to any other ancillary improvements the revenues from which are pledged for the payment of any other bonds then outstanding. The formation of one or more authorities under the provisions of this chapter shall not prevent the subsequent formation hereunder of other authorities with respect to the same determining municipality. (1966, Ex. Sess., p. 340, § 19, appvd. Aug. 30, 1966.)